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IX.—*On the different Kinds of Cuneiform Writing in the triple Inscriptions of the Persians, and on the Language transmitted through the first Kind.*
By the Rev. CHARLES WILLIAM WALL, D. D., Vice Provost T. C. D.,
 V. P. R. I. A.

Read December 13th, 1847.

THE connexion of the subject here proposed for consideration with my inquiry into the origin of alphabetic writing, having compelled me to examine it of late with much attention, and the train of investigation into which I was thus drawn having led me to results which, I am in hopes, will be found not entirely devoid of interest, I venture to bring some of them under the notice of the members of the Royal Irish Academy in the course of the following observations.

1. With regard to the language of the inscriptions of the Persians in the first kind of cuneatic writing,*—besides that the uncertainty which still exists, as to the powers of some of the letters of the system, extends, more or less, to the sound, and, in consequence, frequently to the sense of the groups in which they occur,—a great many of the words completely deciphered in those inscriptions have become everywhere else extinct, and the attempt to identify them with terms of known signification has, in several instances, been made through transmutations of quite too arbitrary a nature to be securely relied on. Hence, as well as from the mutilations to which records of such vast antiquity have of necessity been exposed, no legend of any considerable length in this kind of writing has been as yet found, in which the meaning of some of the sentences does not remain either very doubtful or quite unknown. The most favourable standard that can be taken of the degree of success with which this study has been attended, is unquestionably Major Rawlinson's analysis of the portion of the

* The kind above referred to is called the first, not from its age, but from the position of preeminence it occupies in all the triple inscriptions of the Persians. In point of age, this kind is probably the last of the three, as it is more simplified in its elements than either of the others.

Behistun record in the kind of writing in question. Yet he has been very far from attaining to certainty in every part of his interpretation of this document, as may in a great measure be perceived from his own candid statement on the subject, which is as follows :

“ I do not affect, at the same time, to consider my translations as unimpeachable ; those who expect in the present paper to see the cuneiform inscriptions rendered and explained with as much certainty and clearness as the ancient tablets of Greece and Rome, will be lamentably disappointed. It must be remembered that the Persian of the ante-Alexandrian ages has long ceased to be a living language ; that its interpretation depends on the collateral aid of the Sanscrit, the Zend, and the corrupted dialects which, in the forests and mountains of Persia, have survived the wreck of the old tongue ; and that, in a few instances, where these cognate and derivative languages have failed to perpetuate the ancient roots, or where my limited acquaintance with the different dialects may have failed to discover the connexion, I have been obliged to assign an arbitrary meaning, obtained by comparative propriety of application, in a very limited field of research. I feel, therefore, that in a few cases my translations will be subject to doubt, and that, as materials of analysis continue to be accumulated, and more experienced orientalists prosecute the study, it may be found necessary to alter or modify some of the significations that I have assigned ; but, at the same time, I do not, and cannot doubt, but that I have accurately determined the general application of every paragraph, and that I have been thus enabled to exhibit a correct historical outline, possessing the weight of royal and contemporaneous recital, of many great events which preceded the rise, and marked the career of one of the most celebrated of the early sovereigns of Persia.”*

Though the general purport of the very interesting record here alluded to has, beyond all doubt, been penetrated by Major Rawlinson, the particular passages of it whose exact signification remains yet unascertained are not, perhaps, as few as a sanguine disposition has led him to suppose. But while I hesitate thus far to yield full assent to his description of what he has achieved, I feel pleasure in expressing my admiration of the great ability and adroitness with which he has brought his knowledge of oriental languages to bear upon this branch of the

* Journal of the Royal Asiatic Society, vol. x. part i. p. 13.

investigation ; and I consider it a fortunate circumstance that he commenced operations with the first kind of cuneiform writing, in which his researches have proved really useful, before wasting much of his time and labour on the project of extracting alphabetic designations from the other two kinds,—a project which I expect to be able to show, with respect to one at least, if not to both of them, is utterly chimerical and hopeless.

2. Although the Sanscrit is very generally held to be older than the language of the Persian inscriptions in the first kind of cuneiform writing, yet, I apprehend, it can be proved to be of later formation, even through the admissions of those who maintain the opposite opinion. It is now, I believe, on all sides allowed that the Zend,—which appears to be a corrupt dialect and early derivative of the sacred tongue of the Brahmans,—approaches, in point of grammar, nearer than modern Sanscrit to the language of Darius, transmitted to us in the above-mentioned legends ; and also that the dialect of the Vedas, which is yet more ancient, comes in this respect still nearer to it than does the Zend ; or, in other words, it is virtually conceded that the older the form of the Sanscrit is to which we look, the more closely its grammar is found to agree with that of the language in question. Hence, I submit, it may be fairly inferred, not only that this latter tongue is the elder of the two, but also that it is the main foundation on which the grammatical structure of the former one has been erected.

3. The detection of the groundwork of the Sanscrit, now at length arrived at, powerfully corroborates the proofs brought forward in the second part of my Treatise “on the ancient Orthography of the Jews,” in support of the view there given of the cause and mode of the formation of this dialect. For, why should the Brahmans have resorted to a foreign language, or any modification thereof, as a medium of communication ? It was not forced upon them by an invasion of foreigners ; if it had, it would have been more generally diffused, and not confined, as it was at first, to the priesthood, or, as it still is, to the educated classes of society in India ; neither was it adopted for the purpose of conveying the religious tenets of Zoroaster,—the Hindu priests never yielded admission to those tenets. How else, then, can the introduction of a modified form of the oldest Persian dialect that was at the time accessible, be so naturally accounted for, as by the position I have elsewhere maintained, upon various grounds, that the Brahmans, in imitation of the ancient priests of Egypt, formed, for the purpose

of holding private intercourse with each other, a sacred language, which continued long unknown to all but the individuals of their own caste, and of which, as it would now appear, they took the principal framework, and part of the materials, from the above dialect? Still further, the close degree of congruity, in grammatical structure, which has been observed between the Sanscrit of the Vedas and the language of the cuneiform legends in question, forbids our admitting so long an interval between those dialects, in the states of them exhibited in the compared records, as would suffice to account for the great difference in their ingredients by any process of alteration naturally effected in the course of time. It is true that the materials of a language are more liable to change than its forms, and that roots are altered more rapidly than inflexions; but yet a proportion between the natural rates of variation of the two classes of elements of words holds within certain bounds, which are here quite overpassed. The apparent inconsistency, however, of this case is at once removed, if the mode I have, in the second part of my Work, assigned for the formation of the Sanscrit, be conceded, namely, that it was made to consist of a selection of words from different foreign languages; since, according to this view of the matter, for every non-Persian term introduced, the corresponding Persian one was dropped and abandoned. In this way, and, I will venture to add, in this way alone, can be explained the extraordinary circumstance of so many words of the legends in the first kind of cuneiform writing being lost, notwithstanding that their inflexions and grammatical structure are found still preserved very nearly in the dialect of the Vedas.

4. In dissenting from the extreme antiquity which is very generally attributed to the Sanscrit and Zend, I am happy to find myself supported by Major Rawlinson, with regard to the latter dialect, in the following extract from his essay: “— although I conjecture the Zend to be a later language than that of the inscriptions, upon the debris of which, indeed, it was probably refined and systematized, yet I believe it to approach nearer to the Persian of the ante-Alexandrian ages than any other dialect of the family, except the Vedic Sanscrit, that is available to modern research.”* But this deduction from the internal evidence of the case, with respect to one of the dialects in question, holds *a fortiori* with regard to the other, which is allowed to have a yet closer affinity to the language

* Journal of the Royal Asiatic Society, vol. x. part i. pp. 8, 9.

they both in common are here compared with. Our author is, therefore, I submit, bound in consistency to extend his view of the artificial and comparatively modern origin of the Zend to the Sanscrit; of which latter dialect he might, upon many other grounds also, have asserted that it did not come into existence till long after the Persian of the legends in the first kind of cuneiform writing had ceased to be a living tongue, and that it was then, to a considerable extent,—to use his own form of expression,—refined and systematized upon the debris of that ancient language. He has himself, in another part of the same essay, very candidly acknowledged that the striking similarity of the Greek and Sanscrit letters, in their oldest extant shapes, “requires to be explained;”* and, indeed, this remarkable fact is quite inexplicable, except on the supposition of the Sanscrit alphabet having been in a great measure derived from the Greek one,—a suppo-

* “James Prinsep, who first deciphered this interesting character [namely, that called the Lát character, which exhibits the Sanscrit alphabet in its oldest extant state], was struck with its resemblance to the most archaic form of Greek; and he drew up accordingly a comparative table of the Pali [or rather the Lát] and Sigæan alphabets (see *Journal of the Asiatic Society*, vol. vi. p. 382). His theory, however, has found little favour with palæographers; the names, powers, and series of the Greek letters, together with unanimous tradition, establishing, it is thought, beyond the reach of controversy, their Phœnician derivation. The extraordinary similarity, at the same time, between the forms of the letters, as they were used at a very early epoch by two branches of the Arian family, widely severed as were the Greeks and Indians [that is, at the aforesaid imaginary epoch, before the time of the Macedonian Alexander], together with the common direction of the writing from left to right, in contradistinction to the Semitic usage, requires still, I think, to be explained.”—*Journal of the Royal Asiatic Society*, vol. x. part i. note to p. 41. If the reader will take the trouble of looking back to the comparative table opposite page 405, in the first volume of the second part of my Work, he will there find some of the letters in question plainly and obviously traced to Greek, some to Ethiopic, and some to Roman originals; as also the very peculiar mode of indicating the vocal terminations of the syllables denoted by those letters, evidently brought home to that employed in the Ethiopic syllabary, of which syllabary again the system of vowels is shown in the same volume to be derived from the Greek alphabet. Even the bare appearance, then, of the elements of the oldest known, and, in all likelihood, the absolutely oldest Hindu alphabet, supplies three limits to its age: the Greek part of it could not have been formed till after the first intercourse of the Hindus with the Greeks, that is, till after Alexander’s invasion of India; its vowel marks could not have been formed till after the first intercourse of the Ethiopians with the Greeks, that is, till after Egypt had been reduced under the dominion of the Ptolemies; and its Roman part could not have been formed till after the arrival of the Romans in India, that is, till after the commencement of the Christian era.

sition which, besides that it clears up a difficulty otherwise impenetrable, is further supported by its accordance with the oldest accounts that have reached us of the ancient state of India,* and has nothing against it but the forgeries and fictions

* The oldest authors, who, in works of their's still extant, make express mention of the Brahmins as a learned and sacerdotal class, are Strabo and Arrian; and from the accounts they have transmitted to us, it may be clearly collected that, down to the periods in which they respectively flourished, neither those priests, nor any of the rest of the Hindus, had the slightest knowledge of alphabetic writing. Strabo quotes yet earlier authors, whose works have not been preserved,—Nearchus, who accompanied Alexander in his expedition to India, and Megasthenes, who wrote not long after,—as both of them attesting that the Hindus had no written laws; and he cites the latter of those authors as assigning for this fact the following reason, “for that they [the Hindus] are ignorant of the use of letters, and manage every thing by memory” [οὐδὲ γὰρ γράμματα εἶδέναι αὐτοὺς, ἀλλ’ ἀπὸ μνήμης ἕκαστα διοικεῖσθαι.—*Strabo*, Oxon. edit. lib. xv. p. 1007]. He, indeed, gives also another statement of the former historian, not very consistent with the foregoing one, namely, that the Hindus wrote epistolary communications on bits of fine linen; but, to show how little entitled to credit was this assertion, he subjoins to it from himself the remark: “Whereas the others [that is, all others who, down to his own time, had touched upon the subject] declare that they [the Hindus] do not make use of letters” [τῶν δ’ ἄλλων γράμμασιν αὐτοὺς μὴ χρῆσθαι φημένων.—*Ibid.*, pp. 1016–7]. Arrian wrote near the middle of the second century, about a hundred and fifty years after Strabo, when a great deal more was known to Europeans about India, though not as much as is at present; but as he was in an eminent degree one of the best informed men of the age in which he lived, he surely must be allowed to have been better acquainted with the then condition of the Hindus than any person can now become through other channels; and, consequently, his statements are peculiarly entitled to attention in reference to this subject. Now, he relates in the sixteenth chapter of the sixth book of his *History of Alexander's Expedition*, that the Brahmins were the sophists, or wise men, of the Indians, “concerning the learning of whom, *if indeed they have any*, I shall tell in my *Treatise upon India*” [—ὅπερ ὃν ἐγὼ τῆς σοφίας, εἰ δὲ τις ἐστίν, ἐν τῇ Ἰνδικῇ συγγραφῇ δηλώσω]. The manner in which our author here expresses himself shows that he had a very low opinion of the learning of those sophists; and, accordingly, when he comes to describe it, which he does in the eleventh chapter of his *Treatise on India*, not by quotations from earlier writers, but on his own authority, as upon a matter on which he had fully satisfied himself, he makes it to consist solely in a power to interpret sacrifices and skill in divination, and does not include in it any knowledge whatever of letters. The evidence, therefore, of ancient history, combines with that supplied by the very forms of the letters of the oldest Sanscrit syllabary, to prove that the Hindus had no alphabetic writing till long after the commencement of the Christian era; nor is the force of this proof in the least weakened by the inscriptions deciphered by the late Mr. Prinsep, in the Lāt character, purporting to have been written in the time of Grecian sovereigns who lived before the above-mentioned epoch, as those inscriptions betray several very decisive indications of their having

of the Brahmins. But if the testimony of those boasters be found utterly unworthy of credit, as to the antiquity of their writing, surely more weight cannot, with any show of reason, be conceded to it with regard to the age of their language; nor should such evidence be permitted to extend our estimate of that age beyond the limits to which it is by other considerations restricted. The Zend and Pali are still less ancient, as they recede farther from the language of the legends referred to; and they appear to be merely the Sanscrit, as it became altered and corrupted in the hands of respectively the Parsi and the Buddhist priests; for the two later dialects are much too nearly connected with the earlier one, to admit of the possibility of their having been formed independently of it. If this be a just view of the relation they bear to each other, it adds to the probability of the Sanscrit having been originally confined to the use of a sacerdotal class, since the Zend actually remains so confined down to the present day.

5. The works composing the Zend-Avesta, and purporting to have been written by Zoroaster, are proved evidently spurious by (independently of other considerations) the difference between their idiom and that of the legends of Darius in the first kind of cuneiform character. It is, indeed, attempted to account for this difference by supposing that the Persian sage made use of a provincial dialect. But this suggestion can hardly be reconciled with the tradition that he was the lawgiver of the Persians, and held in the highest respect and veneration by his countrymen. The composition, surely, of such a man, if it ever had existence, must have been looked up to as the standard and model of the purest Persian of his day. Besides, how can an individual who is represented as the friend and companion of Darius's father, Hystaspes,* be conceived to have

been fabricated by the Hindu priests at a much later period. But for a full discussion of this point, I must refer the reader to the eighth chapter of the second part of my Work.

* By Persian authors the patron of Zerdusht or Zoroaster is named "Gushtasp," not "Hystaspes;" and they make no mention of Darius as son of Gushtasp. But Ammianus Marcellinus, who wrote in the fourth century of our era, when the history of the ancient kings of Persia was not as grossly distorted and corrupted in the east as it afterwards became, connects the age of Zoroaster with that of Darius's father, Hystaspes, who is thereby identified with the Gushtasp of more modern Persian historians. "Magiam opinionum insignium auctor amplissimus Plato Machagistiam esse verbo mystico docet, divinorum incorruptissimum cultum; cujus scientiæ sæculis priscis multa ex Chaldæorum arcanis Bactrianus addidit Zoroastres; deinde Hystaspes, rex prudentissimus Darii pater."—*Ammianus Marcellinus*, lib. xxiii. cap. 6.

spoken a different tongue from that of the nobleman with whom he associated ? Or, for a moment allowing this possible, how, of two contemporary dialects, could the provincial one be more refined and systematized than that used at court ? The supposition, then, by which it is endeavoured to maintain the genuineness of the Zend-Avesta, is directly at variance both with the history of its reputed author and with the internal evidence of the case, arising from a comparison of the Zend-Avesta with the language of the inscriptions in question ; and, in all probability, this compilation was not fabricated by the Parsis till above a thousand years after the age in which the founder of their sect is imagined to have lived.

6. With regard to the alphabet employed in the kind of writing under consideration, I shall commence with remarking that it is not an original one, as may, even without appealing to the proofs bearing on the general question of the origin of letters, be shown from the retention in it of signs syllabically used in company with the elements of a superior system ; or from,—what comes nearly to the same thing,—the frequent omission of vowel letters in the words written therewith. For, supposing for a moment that the Persians had arrived at the three classes of phonetic signs of which this alphabet is composed, by means of their own efforts of investigation, without any external aid, they must at all events have so far understood the nature of their own invention, as to perceive the great advantage, in clearness and precision, of expressing syllabic sounds by consonants combined with vowel-letters, rather than by single signs. They, consequently, would have abandoned the last-mentioned class, uniformly employing both of the former ones in the denotation of syllables ; and the circumstance of their having failed to do so renders it quite evident that they derived their system from imperfect observation of some superior one, to the consonants of which, as being the class most difficult to apprehend, they occasionally attached, not their proper, but syllabic values. And as this alphabet is not original in reference to any class of the powers of its letters, so neither is it in regard to their shapes. Some of them are obviously derived from exactly similar combinations of wedges in the second and third kinds of cuneiform writing ; and as for the rest, surely such complicated characters, consisting of so many and such various separate ingredients, could not have been, in the first instance, applied to expressing the simple elements of articulate sounds ; it is, indeed, quite inconceivable that they could. But, suppose them to have been antecedently employed for a length of

time, in some other kind of writing, to denote more complex objects of thought, and the difficulty of the case is removed; for, on a new use of characters being suggested, writers may be easily imagined to be led by the force of habit to transfer to this use symbols they had been previously much accustomed to, though in other respects unsuited to it, rather than take the trouble of selecting new ones better adapted for the purpose. Thus it may be seen that, when a phonetic employment of signs was brought under the notice of the Egyptians, by the circumstance of their being taught Greek writing (as Herodotus expressly records that they were, in the reign of Psammetichus), they did not on that occasion invent new characters, but selected some of their old ideagrams, which they made, through a new application, to stand for the initial articulations or initial vowel sounds of the words by which their former meanings were expressed. Thus, for instance, in phonetically representing the name 'Ptolemy,' they denoted the articulation *l* by the figure of a lion, the Coptic for which animal is *ⲗⲁⲃⲟⲓ*, 'laboi'; and, most probably, the ancient Egyptian term for it began likewise with that articulation. Whether the Persians in the reign of their first Darius acted on the same principle, while shifting the cuneiform combinations from their primitive to a secondary use, cannot, I apprehend, be now ascertained; we can no longer, for example, tell whether the first combination of wedges in the group, No. 1, of the table attached to this tract, had originally a meaning, the ancient Persian word for which began with the articulation *d*; the second, a meaning, the Persian for which commenced with the vowel sound *a*; and so on. But whatever may have been the original significations of those combinations of wedges, their alphabetic values, which are perfectly simple and uncompounded, could not, I submit, have been the primary, but merely derivative applications of signs, containing respectively such a multiplicity of entirely distinct and separate ingredients.

7. The alphabet under examination is, in the main, derived from the Greek one; its consonantal powers, indeed, that are equivalent to *sh*, *w*, and *y*, must have been adopted in imitation of a Shemitic model, and so was likewise its collection of vowels, as shall presently be shown; nor have we any reason to be surprised at the phonetic values of its ingredients having been drawn from different sources, since the Persians, in the time of Darius, the son of Hystaspes,—during whose reign this derivative system first made its appearance,—held intercourse

with nations that employed very different alphabets. But the direction of this writing proves that the powers of its elements were chiefly borrowed from the Grecian alphabet; as no other set of letters known to have been, at the early period referred to, in existence and within reach of Persian observation, was written from left to right. In corroboration of this proof of the principal origin of the cuneiform alphabet, I have to request attention to the two following considerations:

First. The passage of Herodotus, respecting the inscriptions on two pillars erected on the shores of the Bosphorus,* shows that Darius made use of Greek writing (though probably but seldom, and more for the information of foreigners than of his countrymen) as early as the time of his invasion of Scythia; so that the powers of the Greek letters must have come under the notice of his scribes near the commencement of his reign, and, therefore, in all likelihood, before the formation of their cuneiform alphabet. Accordingly, it may be observed that the writing in the Persian inscription is not described by the historian as of three kinds, which, as far as can be known from extant lapidary records, it invariably was after the introduction of that called the first kind. If, indeed, this inscription had been triple, it would have occupied at least four times as much space as the Greek one; and even had it been made in the first kind alone of cuneiform characters, it must have required two pillars for the one of same size appropriated to the corresponding Greek legend. The characters, therefore, employed in the Persian inscription here alluded to, would appear to have been such as belonged to one of the older, or ideagraphic kinds of cuneiform systems. Nor is it any objection to this view of their nature, that Herodotus calls them ‘letters,’ as alphabetic writers have always been in the habit of so denominating the elements of every sort of writing, without distinction. But the substance of our author’s evidence on this subject is entitled to the more weight, from his speaking of the two inscriptions as a person who had seen them, or, at any rate, was in possession of very precise information regarding them; for he tells us, that “afterwards the Byzantians, having conveyed those pillars [displaying the inscriptions in question] to their city, made use of them near the altar of the Orthosian Diana, excepting one stone; and this was left close to the temple of Bacchus in Byzantium,

* — θησάμενος δὲ καὶ τὸν Βόσπορον, στήλας ἔστησε δύο ἐπ’ αὐτῶ, λίθου λευκοῦ, ἐνταμὼν γράμματα, ἐς μὲν τὴν Ἀσσύριαν, ἐς δὲ τὴν Ἑλληνικὰ, ἕθνια πάντα ὕσαπιε ἦγε.—*Herodotus*, lib. iv. cap. 87.

covered with Assyriac letters.”* But a yet earlier acquaintance with the Greek alphabet, on the part of the Persian scribes, might be established, if the accuracy of a statement in the fifteenth book of Strabo could be relied on, in which this geographer asserts, on the authority of Onesicritus, and Aristus of Salamis, that the inscription on the tomb of Cyrus was written in Greek, as well as in Persian. From the account, however, of this subject given by Plutarch, which is more likely to be the true one, it may be collected, that the two legends were of different ages, and that the Greek part of the inscription was not added till the time of the Macedonian Alexander, who ordered it to be insculped under the original epitaph.† Still it is to be observed in this, as well as in the former case, that the Persian legend is not described by any author as triple, and that, therefore, it was most probably in one of the older, or ideagraphic kinds of cuneiform writing;‡ so that, if any weight be allowed to the above statement of Strabo, it concurs with the adduced evidence of Herodotus, to prove that the Persians had some knowledge of Greek letters before they set about forming their cuneiform alphabet.

Secondly. Through recent discoveries of travellers in Lycia, the ancient inhabitants of that country are found to have employed, while under the dominion of the Persians, in inscriptions that may be traced back to very near the time of Darius, an alphabet which is manifestly of Grecian descent. Most of the letters

* Τῆσι μὲν νυν στήλῃσι ταύτῃσι Βυζάντιοι, κομίσαντες ἐς τὴν πόλιν, ὅστερον τούτων ἐχρῆσαντο πρὸς τὸν βασιλῆα τῆς Ὀρθωσίνης Αρτέμιδος, χωρὶς ἐνὸς λίθου· οὗτος δὲ κατελείφθη παρὰ τοῦ Διονύσου τὸν νῆδ' ἐν Βυζαντίῳ, γραμμάτων Ἀσσυρίων πλείους.—*Herodotus*, lib. iv. cap. 87.

† Τὴν δὲ ἐπιγραφὴν ἀναγνούς, ἐκέλευσεν Ἑλληνικοῖς ὑποχαράξαι γράμμασιν.—*Plutarchus*, Ed°. Parisiaca, tom. i. p. 703.

‡ In support of the above point may be further urged a circumstance of a more positive nature. In fact, the two versions recorded by Strabo of the Persian epitaph in question, and that transmitted by Plutarch, differ materially all three from each other, as well as from the later inscription found so often repeated on the remains of the magnificent temple erected to the honour of the deified Cyrus at Pasargadæ, and whose purport is ascertained from the portion of it insculped in the first, or alphabetic kind of cuneiform writing. Now, that the Persian scribes in the time of the Macedonian conqueror should have been unable (as their mutual disagreements show they were) to give the exact meaning of the earlier legend, though very short,—not then above 200 years old,—and about the general subject of which they could no more be ignorant, than they could then make any mistake as to whom the tomb belonged to on which it was inscribed, is a case perfectly reconcilable with the supposition of that legend having been ideagraphic, but not at all so with the notion that it was alphabetically written.

are identical, or very nearly so, with their Greek prototypes; and those which correspond in shape agree also in power, with the exception of *b*, which appears to have been used in the Lycian system with the twofold value formerly attached to *v*, sometimes as *digamma*, or a consonant equivalent to our *w*, and at other times as a vowel, namely, the open *u*, or Grecian *ov*. The following specimens of this writing will serve to give a notion of the character employed in it:

ΑΡΡΑΥΟΣ ΑΡΡΑΥΟΤ:ΤΕΔΤΕΜΕ ΣΤΒΤ:ΡΑΣΑΥ ΙΕΡΣΤ

They are extracted from some of the inscriptions of this sort, collected by Charles Fellows, Esq., and exhibited in a volume of travels which he edited in 1841, accompanied by a brief examination of their contents, in an appendix, from the pen of Daniel Sharpe, Esq. The same specimens, written in equivalent Greek letters, would respectively stand thus: *Αρπαγος; Αρπαγού τεδημε; Σηφη πασαου; Ζερσση*. The first three—taken from the inscriptions on the stele, or pillar, at Xanthus, which are of great length, and all in this kind of writing, except eleven Greek lines on one of the sides*—denote respectively *Harpagus, the son of Harpagus, and of the Pasha of Shals, i. e. of the king of kings*. In the Greek lines on this interesting monument, which unfortunately are not translations of any of the extant Lycian ones, the expression, “the son of Harpagus,” occurs, written ΑΡΠΑΓΟΥΙΟΣ, with the same form of the *sigma* as in the Lycian part of the inscription, and in which the antiquity of the Greek writing is marked by the circumstance of the *ov* termination of the genitive case being represented simply by *o*. At the same time, the use of the two kinds of *o*, and two kinds of *e*, in this writing, shows

* Since writing the above, I have been favoured by the Rev. Doctor James Kennedy Bailie, late Fellow of Trinity College, Dublin, with a more accurate transcript of the Greek part of the Xanthian Inscriptions, made by him from a collation of the copy of Mr. Fellows with those of two other travellers. The Greek lines, twelve in number, are in hexameter and pentameter verse, though not so written in regular alternation; and it appears from them, that the name of the son of Harpagus in question was *Khersis*. Dr. Kennedy Bailie’s talents for recovering the words and sense of mutilated legends, as well as the correctness of his taste and extent of his classical learning, are very conspicuously displayed in two volumes of ancient inscriptions, restored and commented on by him, which were published in the years 1842 and 1846, under the modest titles, respectively, of *Fasciculus Inscriptionum Græcarum*, and *Fasciculus Inscriptionum, Græcarum potissimum*;—works which well deserve the attention of those who take an interest in the subjects to which they relate.

that its date must fall within less than four centuries before the birth of Christ; as this improvement of Grecian orthography cannot be supposed to have come into use earlier in a remote country than in the very heart of Greece. With respect to the meaning of the three specimens, that of the first, and of the beginning of the second, is sufficiently obvious. The signification of the word at the end of the second is ascertained by the aid of a short bilingual inscription at Limyra, consisting of some Lycian lines, with a Greek translation subjoined. For the grounds of the meaning attributed to the two words of the third specimen, I must refer the reader to what Mr. Sharpe has stated on the subject. If his explanation of them be borne out by further investigation, the Lycian *sigma* must be considered as equivalent to *sh*; whether this modification of its original Greek power, to suit the exigencies of their language, was effected by the Lycians of themselves, or through the help afforded by their observation of the elements of some Shemitic alphabet. The fourth specimen—selected from the latter part of the first line of an inscription at Antiphellus, which has the appearance of being by much the oldest of the collection,—is deemed, by the English author last mentioned, to be the name of Xerxes; and his opinion is supported, not only by the sound of the group of equivalent Greek letters, but also by the occurrence, near the commencement of the second line of the same inscription, of two groups similar to those constituting the third specimen, and which are translated by him *of the king of kings*, the well-known ancient title of the native sovereigns of Persia. Surely, then, we need not wonder at the Persians having derived their first alphabetic system chiefly from a Grecian source, when we find one obviously and confessedly sprung from that source employed by a nation in subjection to them, not long after the formation of their cuneiform alphabet, under the auspices of a Persian monarch, and again under those of a nobleman who appears, from the name of his father, to have been a Persian viceroy.* But while the subjugated Lycians made no secret of the external origin

* Two generals of the name 'Harpagus' are mentioned by Herodotus, the one a Mede, in the service of Cyrus, who reduced the lower, or southern provinces of Asia Minor, and, among the rest, Lycia, under the dominion of his master (lib. i. cc. 176-7); and the other a Persian, who commanded an army in the province of Ionia, in the reign of Darius, the son of Hystaspes (lib. vi. c. 28). From the probable age of the inscription on the monument at Xanthus, the Harpagus, whose son appears to have, as governor of Lycia, erected this monument, cannot be

of their letters, the Persians, in the pride of a more elevated condition, endeavoured to conceal their obligations in this respect to foreign instruction ; and, just in like manner as had been shortly before done by the Egyptians while yet independent, they substituted for the Greek characters some of their own ideagrams, though far less suited for the phonetic use to which they thus came to be applied.

8. The vocalic structure of the cuneiform alphabet is "clearly of Shemitic type," as Major Rawlinson very justly observes, in the second chapter of his *Memoir* (p. 62), and as, I believe, has been on all sides admitted, ever since it was ascertained by the late Dr. Beer, that there were but three vowel-letters in this alphabet. The correspondence, however, between the systems of vocalization here compared, extends far beyond the mere number of their respective elements : but, to show this, I must previously advert to a distinction which appears to have been hitherto overlooked, or, at least, not sufficiently attended to in this investigation. A complete determination of the phonetic values of the cuneiform letters would require an analysis of the sounds of ancient Persian names of men and places, not as uttered by natives of Persia at present, or for several centuries back, but as pronounced at the times when the legends containing those names were actually inscribed. This condition, indeed, is no longer attainable, so that we must, with regard to some few of the sought values, rest satisfied with mere approximations ; but still the bearing of it in mind is of use in assisting us to ascertain the authority chiefly to be relied on in this inquiry ; which is certainly not that of any of the Persian writers, as the oldest of their extant historical works of any celebrity, the poetical romance of Firdausi, was not composed till about 1500 years after the age in which Darius, the son of Hystaspes, reigned. Neither do any of the records extant in the cognate dialects, though of such boasted antiquity, carry us back in reality to within a distance of even 500 years from his reign ; and before the expiration of that interval, the denominations of their earlier sovereigns were grossly corrupted by this illiterate people, as I shall presently take an opportunity of showing by the example of the name of the very monarch just mentioned, who, next to Cyrus, was the most remarkable and least likely to be forgotten of all their ancient kings. The only eastern writings

supposed more nearly related to the latter general than grandson ; but, if traced to the former, he must be placed still further in the line of descent from his older namesake.

that come near to the requisite age (being, indeed, somewhat older), are the latest portions of the original Scriptures of the Old Testament ; but, besides that they convey scarcely any of the names in the cuneiform inscriptions, and these too only in a foreign language, their designations thereof are very defectively vocalized, even supposing those designations originally written with the *matres lectionis** they now display, but which were not, as shall be proved in the next volume of my Work, inserted in them till above 600 years after. We are, therefore, compelled, in the due prosecution of this inquiry, to turn from oriental to Grecian vouchers, as far older or better vocalized, and more especially to those transmitted to us by Herodotus, who wrote within twenty-five years after the death of Darius† (before there was time for any material change arising in the pronunciation by the Persians of either the language or the proper names of the inscriptions) ; and whose accuracy, besides, not only as to events, but also as to names, is attested in the most convincing manner by the very legends, when deciphered, which supply the materials of this analysis. The elements of his alphabet, I admit, are inadequate to express some few of the old Persian articulations ; and it must be allowed that he took great liberties with the terminations of foreign names to suit them to the genius of his own language,—a latitude of style in which he was imitated by all subsequent Greek authors. But, with these exceptions, his evidence as to the names in question may be fully and safely relied on, particularly with regard to their vowel sounds, the determination of which constitutes our only sure means of ascertaining the point at present more immediately under consideration, namely, the vocalization employed in the cuneiform inscriptions ; and, whatever may be the imperfection of his testimony, as that of a foreigner, in reference to this point, still, wherever it can be had, it

* The ‘*matres lectionis*’ are consonants which are occasionally diverted from their proper use to denote vowels, and, in consequence of this ambiguity, produce some confusion in unpointed writing, particularly in the expression of foreign names.

† The recital by Herodotus of his remarkable historic production at the Olympic games, is generally placed at the eighty-fourth celebration of those games, or in the year B. C. 444. But if the reader will take the trouble of turning back to the note on this subject in the first volume of the second part of my Work, p. 132, he will there find, I think, strong ground for dating this event four Olympiads earlier, or in the year B. C. 460, that is, about twenty-five years after the death of Darius ; according to which computation the history in question must have been written less than twenty-five years after that death.

is to be preferred immeasurably to the united force of all the oriental evidence that can be brought to bear upon the same subject.

Guided by the principle laid down in the foregoing paragraph, I am enabled to point out two very striking indications of connexion between the cuneiform and Shemitic systems of vocalization, in addition to the one previously discovered by the late Dr. Beer. In the first place, then, the three cuneiform vowel-letters have, each of them, two values, the very same as belong to respectively the corresponding *matres lectionis* of Shemitic writing; that is, they are occasionally employed to denote, the first of the set, *e* instead of *a*; the second, *e* instead of *i*; and the third, *o* instead of *u*. Of the use of the first to express *e*, we have instances in the cuneiform designations of 'Media' and 'Persia,' which should not be transcribed, as they have been by Major Rawlinson through reliance on comparatively modern authorities, 'Mada' and 'Parsa,' but rather 'Meda' and 'Persa,'* in accordance with the pronunciation of those names transmitted to us by Herodotus; and by virtue of which the vowel-letter in question, which immediately follows the initial character in the case of each of the groups alluded to, comes to have in those groups the phonetic value of *e* instead of *a*. Of the use of the second cuneiform vowel-letter to denote *e*, we have instances in the cuneiform groups for the names 'Armenia' and 'Arbela,' deciphered 'Armina' and 'Arbira' by Major Rawlinson, but which should rather be transcribed 'Armena' and 'Arbera;' as the former name is written *Ἀρμενία* by Herodotus, and the latter *Ἀρβέλα* by several Greek authors of less ancient standing; in conformity with which authorities the vowel-letter in question has the phonetic value of *e* instead of *i* in the cuneiform groups just specified. The Major, indeed, to support his reading of this vowel-letter in the former group, appeals to an older authority than he usually employs, the Chaldean expression for 'Armenia' in the paraphrase of Amos, iv. 3, given in Jonathan's Targum, viz., *הרמני*, which he reads 'Harmini' (in page 57 of his memoir); but if he had looked to the pointing of the word in that place, he would have seen that it

* In transcriptions of cuneiform designations of words into better known writing, I make use of italics for the expression of such vowels as are not represented by letters separately appropriated to them in the original groups, but are united with the preceding powers respectively, to constitute the phonetic values of characters that are in those instances employed, not as mere consonants, but as syllabic signs.

should be read 'Harmene,' and, consequently, that, as far as this example is entitled to any weight, it makes not for, but directly against his representation of the matter. Of the use of the third element of the cuneiform system of vocalization to express *o*, instances may be adduced from the cuneiform names of 'Cappadocia' and 'Mardonius,' which should not be transcribed, as they have been by the Major, 'Katapatuka' and 'Marduniya,' but 'Katapatoka' and 'Mardoniya,' in accordance with the testimony of Herodotus, who has written those names Καππαδοκιη and Μαρδονιος; and on whose authority, therefore, the value of *o* is to be assigned to the letter in question in the cuneiform groups here referred to.

For the purpose of sustaining quite a different view of this subject, it has been attempted most ingeniously by Dr. Hincks,* in a paper of his read to a meeting of the Academy in June, 1846, and somewhat later, though independently of him, by Major Rawlinson, to account for occasional changes of the phonetic values of the cuneiform letters *i* and *u*, into, respectively, *e* and *o*, by assuming that very arbitrary rules, analogous to those of the Sanscrit *guna* (according to which *a* combined with *i* brings out the sound *e*, and, combined with *u*, the sound *o*), were employed in this writing; and by further assuming, in order to the application of such rules, that wherever, from any cause, the vowel-letters whose immediate values they confine to *i* and *u*, ought, either of them, to have its sound changed, the preceding character should in each instance be dealt with, not as a consonant, but as the sign of a syllable ending in *a*, the amalgamation of which vowel with the one to be operated on would produce the required alteration of its sound. But, to show the fallacy of this specious theory,

* Though I venture to differ upon some points with the Rev. Dr. Edward Hincks, late Fellow of Trinity College, Dublin, yet, I must say, I consider no author superior to him, and very few his equals, in ingenuity combined with learning. It is, indeed, by means which he has himself supplied, that I am enabled to combat the theory of his above noticed: for, as I may, perhaps, in the next volume of my Work have occasion to show, Dr. Hincks is clearly entitled to the credit of the discovery of the true distinction between the primary and secondary consonants of the alphabet belonging to the first kind of cuneiform writing, namely, that the former may be connected in utterance, each of them, with any of the vowels of the system, but that the use of the latter is more restricted in this respect;—a discovery of the utmost importance in reference to the object of completing our knowledge of the nature and mode of application of this very curious alphabet.

it will be sufficient to refer to two of the examples above given, namely, the transcriptions of the groups equivalent to the *Αρμενια* and *Μαρδονιος* of Herodotus into 'Armena' and 'Mardoniya.' In those examples the *m* of the former group and the *d* of the latter are, by the acknowledgment of both of the authors referred to, secondary consonants that do not admit of being treated as signs of syllables ending in *a*; and, therefore, if the vowel-letters after them were not immediately susceptible of the values of *e* and *o* respectively, as well as of those of *i* and *u*, they could not, in the positions they here occupy, acquire such values by the influence of the assumed operation; and the father of history must have written the above names *Αρμυνια* and *Μαρδουνιος*,—a consequence which is directly at variance with the text of, I believe, every extant manuscript of his work. In truth, the fanciful and highly artificial rules of *guna* belong to a much later age than that of the inscriptions. They are, indeed, quite incompatible with the crude state in which the cuneiform alphabet has been transmitted to us, as has been, I may observe, very judiciously maintained by one of the above-mentioned authors, in the body of his chapter on the subject,* although he rather precipitately came to a different conclusion in the supplementary note thereto appended.

The second feature I would bring under notice, of the cuneiform vocalization, is one that not merely assimilates it to, but even identifies it with that of Shemitic writing. Although the *matres lectionis* soon went out of use in cuneiform designations, yet vestiges of them may still be traced in the inscriptions; namely, of *h* employed for *a*,† *y* for *e* or *i*, and *w* for *o* or *u*. Of course such vestiges should be searched for only in the proper names first written, in which, having been once introduced, they may be easily conceived to have been retained through the force of habit, though the Persian scribes had the option of a less ambiguous mode of denoting vowel-sounds, which came even-

* "It [the Persian cuneiform alphabet] admits not of the epenthesis of the *Zend*, nor of duplication, nor of the artificial developments of the *guna*, and of the *vridhhi*; it acknowledges no law of *sandhi*, properly so called: it is, in fact, in every respect, in a comparatively crude and unfinished state."—*Journal of the Royal Asiatic Society*, vol. x. part ii. p. 53.

† My very limited acquaintance with this writing does not supply me with an example of *h* employed in it to denote *e*;—a use of the first *mater lectionis* which was, probably, as seldom resorted to therein, as in the older kinds of Shemitic writing.

tually to be preferred by them. Thus the *a* sound, which, in the language of the inscriptions, served to distinguish the genitive from the nominative case of the name of Darius, is, in the cuneiform representation of that name, constantly expressed by the letter *h*. Major Rawlinson, in the supplement to his second chapter (p. 182), calls this notation "a clumsy artifice," in which remark I entirely agree with him; but, I must add, it is by precisely the same artifice (and in no other way, when vowel-points are excluded from consideration) that *a* has been designated in every species of Shemitic writing to which the Persians could have had access, from the age in which Darius lived down to the present day. Of the use of the cuneiform *y* to express *i*, we have an example in the very same name (group, No. 1),* read by Rawlinson 'Darayawush,' but which, I submit, should, in accordance with the pronunciation, Δαρειός, transmitted to us by Herodotus, be deciphered 'Dariwush;' the Greek notation perfectly agreeing with my transcription of the cuneiform one, except in the termination of the word, and in the omission of a sign for *w*, which Grecian orthography supplies no means of representing before *u*. Rawlinson, indeed, as well as the decipherers who preceded him, appeals to a supposed reading of this name by Strabo, Δαριαουης; but, even granting for a moment that the Grecian geographer had so read it, surely the authority of any Persians of his day by whom he could have been guided, with respect to the manner in which the word in question was pronounced when the cuneiform legends were being insculped, can bear no comparison with that of such of their countrymen as Herodotus conversed with on the subject, 460 years earlier, and within a very few years of the dates of those legends. Δαριαουης, however, is not Strabo's writing, but only a conjectural emendation of his text by Casaubon, in direct opposition to the unanimous testimony of, I believe, every extant ancient manuscript copy of the work, and recommended by him solely on the ground of its agreement with the Masoretic reading of the Hebrew designation of this name.† But although the Masorets were first-rate

* The group above referred to, written in equivalent Roman capitals, according to the latest values assigned to the cuneiform characters, and without any supplementary letters to denote the unexpressed vowel sounds, would stand thus, DARYWUSH; where the letter modifying the power of S is printed in small type, in order to leave the number of capitals the same as that of the cuneiform letters of the group.

† The note of Casaubon, on the word above referred to, is as follows: "Puto scripsisse Stra-

judges of the grammatical structure of their own language, they have shown themselves, in numerous instances, extremely ignorant of the pronunciation of foreign names; as has been very generally admitted, ever since it came to be known that the Hebrew points form no part of the writing of the original Scriptures. The word referred to in Strabo's text is *Δαριήκης*,* which is manifestly an erroneous representation of the name under discussion, but which, notwithstanding, we have every reason to think was so written by him; and his evidence on this point serves to show how grossly the Persians corrupted the denomination of one of the most celebrated of their sovereigns, even within less than five centuries after his death;—a fact which I may here, by the way, observe, powerfully corroborates the proof I have elsewhere advanced, that, for some part at least of that interval, they must have lost the benefit of alphabetic writing. Of the use of the cuneiform *y* to denote *e*, we have an example in the name of Xerxes (group, No. 2),† read by Rawlinson 'K'hshayarsha,' but which the pronunciation of the word by Herodotus warrants me, I submit, in transcribing 'Khshearsha.' Had the mater lectionis in this group stood for *i*, instead of *e*, the name

bonem τὸν *Δαριαίου*. Nam Hebræis Darius vocatur *דָּרְיוֹשׁ*, Dariaves." In assigning this reason for his opinion, the critic tacitly made three assumptions,—that the Persians in the age of Strabo had a correct knowledge of the manner in which the name of Darius was pronounced by their forefathers about five centuries before,—that the designation of that name in the Hebrew Scriptures was written from the first as full as it now is, *דָּרְיוֹשׁ*,—and that the Masoretic pointing of it so written is correct. But as, according to those suppositions, both parties were right, their representations of the matter must agree with each other, and the modern pronunciation of the name by the Jews gives that used for it by the Persians of the first century. Unfortunately for this conclusion, every one of the assumptions on which it rests is erroneous. The first of them is disproved by the evidence of Herodotus. The refutation of the other two would take up too much room here, and will be given more appropriately in the next volume of my Work.

* The passage of Strabo containing the above word (in which the author incidentally notices and illustrates the changes that had occurred in proper names, and particularly in foreign ones, according to the views which prevailed on the subject in his day in the places visited by him) runs as follows: *Αἱ δὲ τῶν ἰνομάτων μεταπτώσεις, καὶ μάλιστα τῶν βαρβαρικῶν, πολλαὶ καβάπτε τὸν Δαριήκην Δαρεῖον ἐκάλεσαν, τὸν δὲ Φάρζιριν Περυσάτιν, Αταργατὴν δὲ τὴν Αθάραν.*—*Strabo*, lib. xvi. *sub finem*. On this passage it is to be observed that, although there is some difference between the MSS. as to the other names, there is none whatever with regard to *Δαριήκην*.

† The group above referred to, written in equivalent Roman capitals, in like manner as that denoting the name of Darius, would stand thus: *KhShYARShA*.

would have been written by the Greek historian $\Xi\rho\xi\eta\varsigma$, or $\Xi\iota\alpha\rho\xi\eta\varsigma$, rather than $\Xi\epsilon\rho\xi\eta\varsigma$; while it should have been recorded by him $\Xi\alpha\iota\alpha\rho\xi\eta\varsigma$, to justify the Major's reading of the same group. Of the use of the primary cuneiform *w*, to express *o* and *u*, we have instances in the groups for 'Phraortis' and 'Hyrkania,'* deciphered by Rawlinson 'Frawartish' and 'Warkana,' but whose pronunciation by Herodotus, $\Phi\rho\alpha\omicron\rho\tau\eta\varsigma$ and $\Upsilon\rho\kappa\alpha\nu\iota\alpha$, shows that they should rather be transcribed 'Phraortish' and 'Urkana.' To warrant the Major's readings of those groups, the names represented by them should have been written by the Grecian author $\Phi\rho\alpha\omicron\nu\alpha\rho\tau\eta\varsigma$ and $\omicron\nu\alpha\rho\kappa\alpha\nu\iota\alpha$.

The system of cuneiform vocalization having been subdivided into two kinds, one of which is closely connected, and the other absolutely identical, with that employed in every Asiatic species of Shemitic writing, it remains to be inquired which of those systems is the more ancient one. The slightest observation, indeed, of Greek orthography would suffice to make a cuneiform writer pass from his ruder to his less ambiguous kind of vocalization, provided he was not previously long accustomed to the former, and that the whole of his alphabet was then only of recent formation; but still it may be asked, with regard to the ruder and more imperfect kind, which are older, the cuneiform or the Shemitic *matres lectionis*? Now this question must, I apprehend, be decided in favour of the Shemitic class; as their immediate derivation from Greek writing may be naturally accounted for, but not so that of the cuneiform set. For, supposing a Shemitic scribe to have introduced vowel-signs into his alphabet, from observing their use in Greek orthography, and to have, from force of habit, selected for this use, though less properly suited to it, some of his old letters, in preference to adopting new ones for the purpose, he would naturally be led, by the name of the Grecian letter for *a* (*alpha*), to attach this new value to the *h* of his own system, which had the same name, now, indeed, uttered *haleph*, but which there are traces of having been at a very remote period pronounced *halpha*. But the like explana-

* The groups above referred to, written in equivalent Roman capitals, in like manner as the two designations previously examined, would stand thus: PHRWRTISH and WRKAN. In the former of these transcriptions I use the combination *Ph*, with its common phonetic value (not with that specially assigned to it when employed to express the power of one of the letters of the Devanagari alphabet); and, therefore, I do not see any necessity of substituting *F* for it, as Major Rawlinson has done.

tion cannot be applied to the use of the cuneiform *h* to express *a* ; both because there is not the slightest reason to think this consonant had any name similar to *alpha*, and, more positively, on account of the transition from the cuneiform *matres lectionis* to letters that were exclusively employed as vowel-signs ;—a transition that, in all probability, would never have been made by the Persian, any more than by Shemitic scribes, if their alphabet had been, as the application to it of the above explanation would require, an old one before the introduction into it of vowel-letters of the former kind. Supposing this to be a just view of the matter, it follows that the framers of the Persian cuneiform alphabet must have collected, pretty nearly at the same time, its materials of Greek and Shemitic origin, although it is proved to be chiefly of Grecian descent, not only by the direction of the writing in which it is employed, but also by the occurrence in this writing of syllables commencing with vowel-signs, as exemplified in the last paragraph,—a class of designations that has no place in Shemitic orthography.

9. It is for the most part very uncertain, or quite unknown, how the defects of vocalization in the groups of cuneiform letters ought to be supplied. The rule at present observed upon the subject is, whenever, in the transcription of those groups into writing in the Roman character, a vowel is wanted, to insert a short *a*,—a practice which is grounded solely on the affinity of the ancient Persian to the Sanscrit language. But the Zend has likewise an affinity to Sanscrit, and yet does not admit of the application to it of this rule. In fact, it by no means follows from the existence of a close connexion between two dialects, that, wherever the consonantal parts of words, or inflexions of words are the same, the vocal parts must also be identical. This remark may be illustrated by the example of the Hebrew and Syriac tongues, in which many of the grammatical forms are, in their written ingredients, exactly the same, and yet are pronounced with different vowels. But surely Sanscrit does not approach nearer to the old Persian language, as preserved in the cuneiform legends of the first kind, than Syriac does to its Hebrew original. Besides, a further objection lies against the existing practice, that it is, in a large class of instances, at variance with the express testimony of the very legends to which it is applied. The secondary consonants are appropriated, most of them at least, to vowels different from *a*, which are sometimes, though irregularly, omitted. But, in such cases, the groups, as more fully written, clearly point out with what elements the transcriptions of the

defective ones should have their vacancies filled up ; and that it is not with *a*. Thus, the name of the father of Darius is uniformly represented, in the Persepolitan legends of the first kind, by a group to be read 'Vishtaspa' (or, perhaps, 'Whishtaspa'), which is written with a secondary *w*, appropriate to, and followed by the cuneiform *i* ; while, in the Behistun tablets, the initial character of the same designation is syllabically employed, without any letter after it to denote the vocal part of the syllable ; and, in the reading of the latter group, the first supplied vowel should unquestionably be *i*, in accordance with the fuller cuneiform expression of the same name. Major Rawlinson, indeed, in his transcription of the Behistun record, has constantly written this name "Vashtaspa;" but he has virtually allowed this to be an erroneous representation of its sound, in the second chapter of his memoir, by giving there the right vocalization of its first syllable, and a just view of the matter, with regard to this and another particular example.* In cases, however, in which we have no longer any means of ascertaining the vocal sounds of the old Persian words, the Sanscrit mode of supplying their place may as well be adhered to as any other, with the precaution of not inserting a short *a* oftener than is absolutely necessary for the pronunciation of all the elements of the cuneiform groups ; but, wherever the slightest clue is afforded to the vocalization of those groups, it is to be followed in preference to a practice that has nothing but mere arbitrary convention to rest on. Thus the second group, in the common title of Darius and his son, Xerxes, transcribed without any supplementary letters, WZRK, and the modern Persian term, بزرگ, transcribed in the same way BZRG, may be well conceived to be connected ; as the meaning of the latter, "great, powerful, grand, or magnificent" (see Richardson's Persian and Arabic Dictionary), is a perfectly suitable ingredient of the title in which the former occurs ; and as the transition has been frequent in the course of time from the *w* power to that of *v*, and again from the *v* power to that

* "In the name *Vishtaspa*, and in the term *Vitha*, 'a house,' or 'family,' the *i* is irregularly suppressed at Behistun, although preserved at Persepolis ; from which I infer that the character [for V] appropriated exclusively to that vowel had come to be used to a certain extent syllabically, that is, that it was admitted to express the sound of the vowel as well as the labial consonant ; and I have, accordingly, in the words above cited, continued to represent the *i* in the Roman character, but have marked the peculiar cuneiform orthography, by placing a brief accent over the letter."—*Journal of the Royal Asiatic Society*, vol. x. part ii. p. 151.

of *b*, while the remaining articulations of the two words are very nearly identical. But the modern Persian term is read 'buzurg,' which affords, indeed, but feeble light for our direction, as we cannot be certain that the word was always so uttered; yet, even on this ground, the transcription of its ancient prototype should, I submit, be vocalized 'wuzurk,' rather than 'wazark,' as it has been by Lassen, or 'wazarka,' as by Rawlinson, with no more than imaginary or conventional grounds for either pronunciation.

10. The tablets of the Behistun inscription deciphered by Major Rawlinson, namely, those insculped in the first kind of cuneiform character, powerfully sustain the view I have elsewhere given of the comparative merit of the histories respecting Persia in remote ages, that have issued from the pens of ancient and modern authors. In the first place,—what, indeed, might be expected *a priori* to be shown of accounts orally transmitted, which do not appear to have been committed to writing till about 1500 years after the reign of the first Persian Darius,—they expose in the clearest manner the utterly fictitious character of the portions of the histories of Persia, composed by natives of the country, that are supposed to relate to the times in which that monarch lived. They, in fact, do not support, by even the slightest shade of resemblance, any of the names but one ('Gushtasp,' which seems to be a corruption of their 'Whishtaspa'),* or any whatever of the events mentioned in the portions referred to of those compositions. In the second place, the tablets in question establish a high degree of accuracy for the historic work of Herodotus. The contents of the two records embrace in common a vast number of names agreeing, in the great majority of instances, as closely as the difference between native and foreign pronunciation would permit; and likewise include descriptions of several incidents that tally with each other wonderfully, considering the different situations of their respective authors, who, circumstanced as they were, could not be expected always to take entirely the same view of even the very same transactions. Among the items in which the compared

* While the *Whishtaspa* of the Behistun inscription corresponds in nothing but name with the *Gushtasp* of modern Persian historians, he at the same time agrees in several other respects with the *Hystaspes* of Herodotus: as, for instance, each of them was son of Arsames (Arshama); each was father of Darius (Dariwush); and, while the former is placed in the very peculiar situation of a general acting under the orders of his own son, the latter is found, in complete accordance therewith, young enough to be governor of Persia at the time of that son's accession to the imperial throne.

documents substantially agree may be reckoned, the pedigree of Darius; the number of the provinces of his empire;* the invasion of Egypt by Cambyses; the fact that this Cambyses was son of Cyrus; the murder procured by him of Smerdis, his brother; the circumstance of this man being so related to him, on the mother's as well as on the father's side; the personation of this brother, and seizure of the empire, by one of the Magi; the death of this Magian by the hands of Darius himself; the number and names, as far as they are legible, of his associates in this enterprise; his elevation to the throne of Persia; and his quelling a revolt of the Babylonians, and capture of Babylon. The only point related by them in common, on which they materially differ, is respecting the names of the provinces of the empire of Darius. Even here they agree with regard to a majority of the names in question; and, where they do not, the difference may, with a considerable degree of probability, be accounted for, partly by the circumstance of some of the provinces having more names than one,† and partly by the practice of Herodotus, in distinguishing others, not by their territorial denominations, but by those of the tribes by which they were respectively occupied.‡ On

* Darius states the number of provinces in his empire to be twenty-three, while Herodotus, on the other hand, reckons them only twenty. But the latter author omits Persia, which was free from taxation, as he enumerates only those countries and nations which paid tribute; and at the end of his list he observes that, in the course of time, contributions were levied also from certain islands, and from those inhabiting Europe [from the Bosphorus] as far as Thessaly. *Περσῶντο μείντοι τοῦ χρένου, καὶ ἀπὸ ἡσων προσήϊ ἄλλος φόρος, καὶ τῶν ἐν τῇ Εὐρώπῃ μέχρι Θισσαλῆς οἰκημένων.*—*Herodotus*, lib. iii. cap. 96. If, in this passage, the writer understood the places from which the additional contributions came to form two provinces, he and Darius agree exactly as to their number; and at any rate they differ but by one.

† As an instance of the above mode of reconciling the two sets of names may be taken the ‘Mudraya’ of the Persian list, which is clearly identified with the *Αἴγυπτος* of the Grecian one, by the context of the portion of the Behistun record which relates to Cambyses. In accordance with this identification, it is stated by one of the Byzantine writers, that Egypt was called ‘Muara’ (or rather ‘Mudra’) by the Phœnicians,—*ἐκλήθη καὶ Μύαρα ἢ χώρα ὑπὸ Φοινίκων*,—*Stephanus Byzantinus de urbibus et populis, in loco ubi disserit de Ægypto*,—where, by the way, as has been justly observed by Major Rawlinson, the cuneiform inscription enables us to correct an error of the copyists of this Grecian geographer and grammarian; since it shows that they changed ΜΥΔΡΑ into ΜΥΑΡΑ, deceived by the similarity of the letters Δ and Α.

‡ The second of the above modes of accounting for the difference between the two lists may be illustrated by the ‘Arabaya’ of the Persian list, which has no denomination to correspond

the whole, the degree of agreement between the contents of the histories here compared is really surprising, when we consider how independently of each other they were written; and so close a congruity between them could, I apprehend, have arisen solely from the truth in the main of both, as far as they refer to the same subjects. In the third place, the Behistun tablets evince the superiority of Herodotus even to Xenophon, in correctness of historic information.

To show the bearing of this record upon the two latter heads, as well as to give some idea of the style it is composed in, I subjoin an extract from the beginning of Major Rawlinson's free translation of it into English, inserting within brackets, after each proper name, a closer representation of its sound from his transcript of the cuneiform text into Roman letters, with (even where I think a change might be made for the better) no other alteration than that of substituting italics, as I have all along done, for such of the latter characters as have none to correspond with them in the original groups :

"I am Darius [Dar(*a*)yawush], the great king, the king of kings, the king of the (dependent) provinces, the son of Hystaspes [Vashtasp*a*], the grandson of Arsames [Arsham*a*], the Achæmenian [Hak'hamanishi*a*]. Says Darius the king : my father was Hystaspes ; of Hystaspes the father was Arsames ; of Arsames the father was Ariyaramnes [Ariyaram(*a*)n*a*] ; of Ariyaramnes the father was Teispes [Chishpaish] ; of Teispes the father was [Hak'hamanish]. Says Darius the king : on that account we have been called Achæmenians ; from antiquity we have been unsubdued (or, we have descended) ; from antiquity those

with it in the Grecian one ; but, from the circumstance of the Greek historian's uniting the Sagartians, the Sarangeans, the Thumaneans, the Utians, and the Mycans, with the inhabitants of islands in the Red Sea, as forming one set of payers of a joint tribute (lib. iii. cap. 93), it would appear that the tribes just enumerated lived in the neighbourhood of those islanders, and consequently within the limits of Arabia. Nor is it any objection to this location of the specified parties, that Herodotus elsewhere (lib. i. cap. 125) ranks Sagartians among the Persian tribes ; for the Sagartians here referred to must be quite different, as they paid tribute, from which, he tells us (lib. iii. cap. 97), every branch of the nation that inhabited Persia was exempt. The agreement thus made out between the two nations is, I allow, very far from being complete in this particular instance, in consequence of Darius's representing the whole of a country as subject to him, of which only a part had really submitted to his authority. This instance, however, of boasting, does not cast any strong imputation on his veracity ; as such exaggerations, with respect to extent of territory, have been resorted to by sovereigns in all ages of the world, without the practice being considered or intended as an absolute violation of truth.

of our race have been kings.* Says Darius the king : there are eight of my race who have been kings before me, I am the ninth ; for a very long time we have been kings.”

Let us compare with this extract the following passage of Herodotus, part of a speech of Xerxes, in which he is represented as incidentally giving his father’s pedigree :

“For I could not have sprung from Darius (who *was the son* of Hystaspes, who *was the son* of Arsames, who *was the son* of Ariaramnes, who *was the son* of Teispes, who *was the son* of Cyrus, who *was the son* of Cambyses, who *was the son* of Teispes, who *was the son* of Achæmenes), if I were not to take vengeance on the Athenians.”†

The exact agreement between the first four names and the last one of the two lists is surely (considering the wholly independent sources from which they were taken) very striking ; and, even where those lists differ, the remainder of the Persian statement attests the perfect correctness of the Grecian enumeration ; for, though Darius mentions but five names in the line of his descent, he expressly declares that eight of that race were kings before him,—the very number of them distinctly reckoned up by the Greek historian. Moreover, the same statement adds strength to the grounds I have, in the second part of my Work, assigned for preferring the account of Herodotus to that given by Xenophon, with respect to the condition in life of the father of the principal Cyrus. The part of the quoted

* In the above sentence Darius speaks of his family at large, as is indicated by his use of the pronoun ‘our ;’ but in the next sentence he speaks of that particular branch of it to which he himself belonged (and which he had just before described), as is marked by his use of the pronoun ‘my.’ There is the same word, *tumá*, in both places of the original ; but still, I am inclined to think, the difference of the senses in which it is employed would have been better pointed out in the English, by varying its translation ; by, for instance, inserting the expression “our family,” in the former place, and leaving, as it stands, “my race,” in the latter. In accordance with this distinction, Darius subsequently speaks of Cambyses, the son of Cyrus, as member “of *our* tuma,” but never of him as member “of *my* tuma :” for Cambyses belonged to the same family as he did, but not to the same branch of that family.

† Μὴ γὰρ εἴην ἐκ Δαρείου τοῦ Ὑστάσπιοις, τοῦ Ἀρσάμειος, τοῦ Ἀριαράμνιω, τοῦ Τείσπιοις, τοῦ Κίρου, τοῦ Καμβύσιω, τοῦ Τείσπιοις, τοῦ Ἀχαιμένειος γαγονῶς, μὴ τιμωρησάμενος Ἀθηναίους.—*Herodotus*, lib. vii. cap. 11. The third name in this pedigree of Darius is variously written in different copies of the work, Ἀρμενω, Ἀριαράμνω, or Ἀριαράμνιω. The Behistun inscription actually enables us to decide which of these is the correct reading of the word.

declaration of Darius that bears upon this point evidently does not mean that the eight persons of his own race referred to were all kings *de facto*,—as, at any rate, such of them as were contemporary with the Cyrus in question and his son, Cambyses, could not have been so,—but merely signifies that they had in succession a just claim to the throne, in virtue of their birthright. Now it is not, I submit, laying too great a stress upon the veracity of our royal author, to maintain that he could not have made the public declaration he did, in this sense, unless his race was notoriously the eldest branch of the Achæmenian family; or, at least, unless it had become a matter of uncertainty what race was really entitled to that distinction.* But both suppositions are at variance with the account Xenophon gives of Cambyses, the father of Cyrus, which is simply that he was king of Persia, without adding how he came to the throne,—an omission which implies that he held it by clear and undisputed right of inheritance;—while, on the other hand, either of those consequences drawn from the above declaration is fully compatible with the representation of Herodotus, that the individual in question was, indeed, a Persian of good family, but yet of so low a condition, as to be deemed by Astyages far inferior to a Mede of even middle rank.† Nor do the numerous insurrections against the authority of Darius, which are described in the rest of his record, tell against the inference here drawn from its commencement; for, even supposing it certain that Cyrus belonged to a junior branch of the royal family, the Persians might yet have considered him as having acquired a right to the crown by his exploits, and as the founder of a new dynasty; in reference to which dynasty Darius, unless he was the nearest surviving relative of Cambyses, must have been an usurper, though the legitimate representative of the older race of kings.

The brevity with which the several victories recorded in the Behistun tablets are described, is not, I apprehend, to be attributed to any remarkable modesty of

* The above state of uncertainty would have naturally arisen among a people without the benefit of alphabetic writing, if they, as there is reason to think was the fact, were deprived of a regal government of their own by their Median conquerors, and no member of their royal family was actual king for some generations. Had the paternal pedigree of so remarkable a man as Cyrus been exactly known, it surely would have been recorded by some ancient author, as well as that of Darius.

† [Ἀστυάγης] δὲ [Μανδάνην] Πέρσῃ διδοῖ, τῷ οὐνομα ἦν Καμβύσης· τὸν εὗρισκε οἰκίης μὲν ἰόντα ἀγαθῆς, τρέπου δὲ ἡσυχίου· πολλὰ ἔτιθεσι ἄγων αὐτὸν μίσσιν ἀνδρὸς Μήδου.—*Herodotus*, lib. i. cap. 107.

the author, but to the extreme clumsiness of the alphabetic writing of his scribes, which required considerable space for even the shortest sentence; so that much could not be told, unless all superfluous redundancy of expression were omitted. As to the difference between him and Herodotus in the selection of materials, it can be very naturally accounted for. Darius suppresses some particulars which, it may be readily conceived, he did not wish to make known to posterity, as, for instance, the groom's artifice to which he was indebted for his election to the crown, and likewise his disastrous expedition into Scythia; others he fails to mention, most probably from their not having occurred till after the insculpture of the Behistun inscription; as his conquest of India, and the invasion of Greece; while, on the other hand, numerous battles fought, and victories gained in crushing insurrections, are passed over without notice by the Greek historian, in consequence, it is likely, of his supposing that no value would be attached to any account of them by the generality of readers. And, in fact, however interesting the recovered portion of the history of Darius may at present be, from the manner in which it has been brought to light, after a concealment of considerably above two thousand years' length, the detail of the achievements it records is not of the slightest use to us, farther than as it explains why he was distinguished by the characteristic denomination of the 'coercer,'* and serves to display more fully the extraordinary talent and energy he possessed. But the power of his mind is by nothing proved so strongly as by his voluntary adoption of alphabetic writing,†

* The name 'Darius,' like most of the ancient ones, is characteristic, signifying 'coercer,' in the ancient language of the Persians, as we are informed by Herodotus (lib. vi. cap. 98); and his evidence on this point is strongly supported by the fact that there is still extant in both the Sanscrit and Zend, which are closely connected with the above language, a root with the meaning 'to coerce,' and having a near affinity in sound with the word in question. This fact is stated by M. Burnouf, as follows: "En résumé *Dâriuch* signifie réellement *coercitor*, comme le pensait Hérodote, parce que ce mot dérive d'une manière naturelle du radical Sanscrit et Zend *dhrî* (contenir)." — *Mémoire sur deux Inscriptions Cuneiformes*, &c., p. 68.

† It has been taken for granted by some authors, rather too precipitately, that the use of cuneiform writing of the first kind was introduced by Cyrus, on account of the triple inscription to his memory found at Murghab, one part of which is in this writing. But Cyrus can hardly be supposed to have got his own epitaph written; and the building on which the several copies of it were inscribed, is proved, even by its ruins, to have been of so magnificent a description, that there could scarcely have been time for its erection after the death of this conqueror till the reign of Darius.

which, indeed, it was his practice to combine with other kinds, as better known to his subjects ; but for which he still marked constantly his preference by the place he gave it in the triple cuneiform inscriptions. And the soundness of his judgment on this point is the more conspicuously exhibited by contrasting his conduct with that of his successors, who, after the species of writing in question had been once introduced, and its superior utility had of necessity been perceived, at least to some extent, allowed it, notwithstanding, to be discarded, in compliance with the interests or the prejudices of their scribes.

11. I shall now proceed to bring together under view the specimen of the name *Xerxes*, written both in cuneiform and in hieroglyphic characters on an alabaster vase in the 'Cabinet du Roi,' at Paris, which was first noticed by Count Caylus, and another of the name *Artaxerxes*, similarly expressed in the same two kinds of writing, which was more recently discovered by Sir J. G. Wilkinson on a vase of like material in the Treasury of St. Mark, at Venice. Copies of the two specimens are inserted under Nos. 2 and 3 in the table connected with this paper, taken from the sixth plate in the thirty-first volume of *Miscellaneous Tracts*, published by the Society of Antiquaries of London, under the title of *Archæologia* ; but I have omitted the cuneiform writing of the second and third kinds (which I hold to be non-alphabetic), as also the portions of the lines in the first kind of that writing after the two names, which are partly mutilated, and likewise the second representation of the name *Artaxerxes*, in the same character, as altered by Major Rawlinson. Contiguous to the cuneiform characters, and to such of the hieroglyphs as are used as letters, are placed the phonetic values they are confined to, or admit of ; according to which the Persian and Egyptian designations of the first name should, I submit, be read respectively, KhShEARShA and KhSEALSA ; and those of the second, ARDaKhCheShE and ALTDaKhSaSa. The final character of the second cuneiform designation, the more usual value of which is *i*, Major Rawlinson altered to the letter of *ch* power, making it the same as the antepenultimate one of the group, which he in consequence reads ARDaK'hChaShCha ;*

* The reading of this name, in the plate of the *Archæologia* above referred to, is engraved ARDaK'hChaShaCha ; but it is not fair to impute to the Major the blunders of his correspondents ; and I have, therefore, ventured to substitute in my text a transcription in accordance with *Ardak'chashcha*, which is that given by himself in the second chapter of his memoir, at the bottom of page 50.

but he was quite unwarranted in this alteration, if the specified plate of the *Archæologia* be correct, which exhibits the character in question in as perfect a state as any in the group it terminates, and shows mutilation only in the subsequent part of the same line, which has not been copied in my table. Had the Major perceived the correspondence of this character to the Shemitic *yod*, in occasionally serving to denote the sound *e*, he would have found no necessity for correcting it in this place; where, in fact, *e* answers better than any other vowel to that used by Herodotus in his transcription of the last syllable of the above designation. He considers this designation, as changed by himself, a very corrupt one; and, to give time for such corruption taking place in cuneiform orthography, concludes that it was intended for the last sovereign of the name it expresses, that is, for Artaxerxes Ochus. But, granting the altered, or even the unaltered group, to be very corruptly written, still the inference thence drawn by our author does not stand, and the Artaxerxes here denoted may, notwithstanding, have been (and most probably was) the immediate successor of Xerxes; as the deviation in this instance from correct Persian orthography is best accounted for by the provincialism of the writer. For the use of *l*, instead of *r*, in the Egyptian portion of the specimens before us, proves them to have been written, not by Persian, but by Egyptian scribes, who probably belonged to some tribe that in after times spoke the Bashmuric dialect of the Coptic language.* A Persian would, to a certainty, have employed a hieroglyphic *r* in the Egyptian designation of either of the two names, where the *l* now appears in it; while, on the other hand, an Egyptian, even though of a tribe of men that were unable to utter *r*, must yet have inserted a cuneiform letter of this value in the Persian designation of the same name; as the cuneiform alphabet afforded him no option on the subject, not containing any element immediately and properly of *l* power. On the cuneiform part of these specimens I have only further to observe, that the use of the cuneiform *y*, in the first name, as a mater lectionis, is fully attested by the corresponding letter of the hieroglyphic designation of the same name, viz., the two feathers, which always stand immediately for a vowel, whether *e* or *i*, according to the exigency of the case.

* But few fragments of the above dialect have been as yet published; one of its most remarkable features, as displayed in those fragments, is, that *r* is wanting in them, and that they always exhibit the Coptic *l*, where the letter of *r* power is employed in the other two dialects of this tongue.

But a comparison of the two specimens serves to throw a still more interesting light on their Egyptian portions, as, for instance, in the following particulars. In the first place, the second hieroglyph in the first cartouche is shown by its variant in the second cartouche, the divided sceptre, not to be invested, as has been hitherto supposed, with the power of *sh*, but merely with that of *s*. This result adds to the many proofs I have elsewhere advanced, of the phonetic use of hieroglyphs by the Egyptians having been derived solely from Greek writing; for here, in the transcription of the Persian *sh*, there is employed a letter of merely *s* power, precisely in the same defective manner as a Grecian scribe would have been compelled to express its value by a *sigma*, if he had given separate signs for the cuneiform *kh* and *sh*, instead of substituting his *xi* for both combined. The Coptic alphabet, indeed, includes a letter of *sh* power, which is one of the circumstances that contribute to show it was not formed till after a communication was opened between Egypt and Asia, by the reduction of that country under the dominion of the Persians; but the system of phonetic hieroglyphs having commenced while yet the Egyptians had intercourse with no alphabetic writers but Greeks,* was subsequently confined, through the force of habit, to the same powers that it had at first; in consequence of which, its extant remains still betray, and that, too, in several ways, its exclusively Grecian origin.

In the second place, the circumstance of exactly the same collection of hieroglyphs being exhibited in common in the lower part of both cartouches, naturally suggests the notion of its signifying the common title of the Persian sovereigns, viz. 'great king, king of kings,' which is found so generally subjoined to the royal names in cuneiform legends. In accordance with this view of the bearing of the collection, we may observe that the sceptre, a symbol of 'royalty,' and

* The policy observed by the native princes of Egypt, of excluding all foreigners from intercourse with their subjects, was first deviated from in favour of Greeks, and in the time of Psammetichus; who, as we are informed by Herodotus (lib. ii. cap. 154), having ascended the throne by the aid of some Ionian and Carian soldiers that had been shipwrecked on the coast, gave them a settlement in the country, and had certain Egyptian children committed to their care, to be by them instructed in the Greek language, and, consequently, in the Greek mode of writing. This account of Herodotus is corroborated by Diodorus Siculus (lib. i. cap. 67), both as to the reign in which the intercourse with Greeks began, and as to the immediate consequence of that intercourse. But the latter historian makes a more direct reference to alphabetic writing, as he tells us of the Egyptian boys being instructed, not merely in the Greek language, but in Greek learning.

thence of 'king,' occurs twice among its ingredients; while the intervening character, a bird with extended wings, is, like the spread eagle of European heraldry, a suitable emblem of 'supremacy,' or 'dominion.' But in the examination of part of the Rosetta inscription, in the first volume of my Work, I have shown, I think, beyond a doubt, that figures of the limbs of the human body, when ideographically used in this kind of writing, served to denote action. The hand, therefore, at the bottom of this collection, when combined with the bird, has an effect on its signification analogous to that which would be produced in alphabetic writing, by changing an abstract term into the form of a participial noun, or participle active; so as, for example, in the present instance, to convert the meaning of 'rule,' into that of 'ruler,' or 'ruling.' It may be added, that the connexion of the symbols requires the second emblem for 'king' to be understood in a plural sense; precisely as, even up to the present day, in Chinese writing, it, in general, depends solely on the context of the passage in which an ideogram occurs, whether it be made to represent one or more individual persons or things. If this explanation be just, the Egyptian title, virtually agreeing with the Persian one in four of its elements, must equally do so in the remaining ingredient, the symbol at the top of the collection, which, in consequence, is found to tally with the group of the cuneiform title *WuZuRK*, signifying 'great;' and thus the literal meaning of the whole ideographic expression comes out, 'great king, ruler of kings.' It is no objection to my analysis, that the plural sense of a noun is indicated in the Rosetta inscription by the repetition of its sign three times, or by connecting therewith three little straight lines or marks of units. The difference, in this respect, between the earlier and later modes of hieroglyphic designation, is merely the result of one of the improvements which were, in the course of little more than two centuries, effected in the style of the Egyptian scribe, by his acquaintance with Greek writing. Neither is it any objection to the virtually complete identity of the Persian and Egyptian titles here compared, that an expression for 'king' occurs three times in one of them, and only twice in the other: as three sceptres brought immediately together, in writing as yet destitute of connecting marks, would merely signify a plurality of kings; and the only inference that could be drawn from their assemblage in the two cartouches would be, that the Egyptian insculptors had arrived at a mode of distinguishing the plural number in their legends earlier than, in the actual state of the case, it appears they did. From

the very defective nature of this writing so far back as the times of Xerxes and his son, Artaxerxes, it would have been impossible to express the requisite meaning, without making the middle symbol of the three under consideration different from the other two. In fine, if any one should prefer reading the Egyptian title, 'great king, emperor of kings,' I do not demur to this version of the sentence, as it is in vain to attempt confining such a vague mode of designation to any precise form of words. I claim only to have ascertained the general bearing of the collection of symbols referred to; and so much, I am in hopes, it will be allowed that I have effected.

What greatly increases the probability of the foregoing analysis being in the main correct, is the total failure of the attempts to explain the same title on the assumption of its elements being phonetically employed. According to this view of the manner in which they are significant, the aggregate of them corresponds in meaning, not to the entire cuneiform title, but only to its second group, and, therefore, would, through the interpretation of that group at present received, merely denote the epithet 'great.' But, surely, it is not for a moment to be imagined that the Egyptians, who conferred on their Grecian sovereigns such a multitude of titles as are displayed in the Rosetta inscription (among which is included even that of divinity), would have been sparing of their terms of fulsome adulation to a Persian monarch, and have styled him simply 'Xerxes the great,' or 'Artaxerxes the great,' without even so much as calling him king; while the subjects of his native dominions, though in a far less degrading position, yet honoured him with the appellation of 'king of kings.' Surely, the mode here attributed to the Egyptians of styling their sovereigns, which is so comparatively devoid of servility, is utterly inconsistent with the character of that people while under foreign sway, as well as with the abject state of slavery to which they were reduced by their Persian conquerors. Even, then, if the phonetic application of the hieroglyphs, which necessarily leads to the above, or some similar construction of their bearing, were advocated with the most imposing plausibility, it should still be rejected as quite inadmissible. In point of fact, however, not the slightest semblance of an adequate reason has been adduced for any such application of those characters; as may, I conceive, be plainly seen from the following review of this part of the case.

Though St. Martin had no warrant beyond mere conjecture for his attempt

to decipher the second group of the cuneiform title, *i-e-r-e*, and interpret it either 'valiant,' or 'Arien;'* yet, upon this weak authority, Champollion confidently read what he assumed to be the corresponding Egyptian expression, that is, the five hieroglyphs under discussion, *i-r-e-n-a*, or *i-r-ie-n-o*, and assigned to their combination the meaning of 'Persian.'† The first step of this process being now on all sides abandoned, the remaining ones dependent thereon must be equally rejected; but, I must add, Champollion's part of the investigation bears, even on the very face of it, the marks of its unsoundness. I do not allude to this author's assigning here to the bird with expanded wings the phonetic value of *e* or *ie*, and giving it elsewhere, as M. Klaproth has observed, that of *p*;‡ because this latter application of it is not before us. But, confining our attention to the collection of characters now under view, the slightest consideration must show the inconsistency of using the sceptre in one place with the power of *r*, and in another part of the very same collection with that of *n*. Moreover, allowing for a moment that this collection could be read *Irena*, or *Irieno*, no proof is offered of this being the Coptic or ancient Egyptian term for 'a Persian,' nor, indeed, is there any trace of either series of articulate sounds constituting a Coptic word at all. At present the combination of hieroglyphs in question is read *Erpra*, and interpreted 'great,' with fewer blunders, indeed, than before, but with no better success in the course of the investigations leading to these results. With respect to the process of deciphering resorted to, the sceptre, it is true, has not here appropriated to it two inconsistent powers; but the phonetic values of the first and third, supposing them to be ever used as letters, are not satisfactorily established; and, even could it be proved that the entire five admitted of being correctly read *Erpra*, there yet is no such Coptic word extant,—at least, no one like it is to be found in Peyron's or Tattam's Dictionary. Again, with regard to the interpretation, it is, I grant, made out with a high degree of probability, that the second group of the cuneiform title means 'great;' but still the inference that the hieroglyphic combination under discussion also means 'great,' entirely fails; because, though one of the premises from which this inference is

* See *Memoires de l'Académie Royale des Inscriptions et Belles-lettres*, tom. xii. seconde Partie, pp. 129, 130.

† See *Précis du Système Hieroglyphique*, première Edition, p. 179.

‡ See *Examen Critique*, &c., par M. Klaproth, pp. 30-32.

drawn is most likely to be true, the other, that the whole hieroglyphic title corresponds to only a part of the cuneiform one, is a mere gratuitous assumption, with nothing in its favour, and with, as has been above shown, very strong reasons against it. Yet the reading and signification so arrived at, of the collection of hieroglyphs in question, are, in the article of the *Archæologia* here referred to, put forward authoritatively, without proof, as if too well known to require any, in the following terms: "The hieroglyphics, as given by Champollion, in his 'Précis du Système Hiéroglyphique des Anciens Egyptiens,' plate vii. fig. 125, read Kh-sch-e-a-r-sch-a, 'Xerxes,' followed by *Erpr*, which he conjectured to read *Irina*, or *Iriéno*, and to signify Iranien or Persian. This interpretation, however, must be abandoned, for *Erpr* means *great*."* Thus it is, that whatever falls in with the popular opinion of the day is confidently proposed, and as readily received, upon the mere assertion of the writer; and seldom, before experience has assisted to prove the futility of one of those opinions, or its consequences, does any attempt to refute either gain a fair hearing, with that degree of attention to the arguments adduced on the occasion, which is necessary to a just decision of the question at issue. This complaint is not directed against Mr. Pettigrew in particular,—the author of the article from which the quoted passage is taken,—but against the practice in general which prevails upon the subject.

I should not have dwelt so long on this example, but for its bearing on the subject of the present Essay. The vain effort to decipher and interpret ideagraphic records as if their texts were phonetic, which has already been made in the case of the monumental inscriptions of the Egyptians of old, with an ill success that might have been anticipated from the express testimony of ancient authors, as to the manner in which the elements of those inscriptions are, for the most part, significant,† is now in course of being repeated, with regard to legends in two of the three kinds of cuneatic character of late years found to have been

* *Archæologia*, vol. xxxi. p. 276.

† Of the ancient Greek and Roman authors who allude to the hieroglyphic writing of the Egyptians, every one, without a single exception, represents it as ideagraphic: even Clemens Alexandrinus, who mentions the use of letters in it, still, in speaking of its general nature, calls it symbolic; and Diodorus Siculus, moreover, expressly denies respecting it, when considered in the like general point of view, that its elements served to denote any combination of syllables, in a passage which may be seen examined in the first chapter of the second part of my Work.





employed, at a very remote period, by Persians; which legends are rashly assumed to be alphabetically written, because those in the kind of that character called the first are ascertained to be so. Every illustration, therefore, of the futility of the attempt in the former instance must be of use, through its tendency to awaken suspicion and deter men from the repetition of a like waste of time and labour, before they have been so long and so busily engaged in this second investigation as to have become infatuated with it, and blind to all proof of its visionary and fruitless nature. With persons as yet unprejudiced on this subject, the following considerations may also have, perhaps, some influence in guarding them from erroneous views respecting the point under discussion.

12. If we turn to No. 4 in the annexed table, which exhibits a copy of the triple inscription, so often repeated, on the remains of the pillars in the ruins of Murghab (supposed to be the site of the ancient Pasargadæ), we must be struck with the great difference of length of the legends in the three kinds of cuneatic writing, allowing,—what is on all sides conceded, and is most likely to be the actual state of the case,—that they all convey the very same meaning. The legend in the first kind of this writing,—which is read ADaM* KURUSH KhShAYaThIYa HaKhAMaNIShIYa, and signifies literally “*I am Cyrus, king, Achæmenian,*”—occupies the two upper lines of the inscription; while the others take up the two under ones, each having but a single line appropriated to it. As the purport of the deciphered legend is told in the fewest possible words, the greater shortness of the other two is not to be attributed to any greater brevity of style employed in them; nor could it be occasioned by any difference of language, as two of the words, the proper name and the derivative from one, which make up at least half the entire written sentence, must be nearly the same in all languages; neither can it be laid to the account of smaller writing, as the general size of the several compound characters in each of the lower legends is actually greater than that of the letters in the top one; nor again is the explanation of it at present received by any means satisfactory, the assumed cause,—namely, that the elements of the two kinds of writing in the under legends are syllabically used,—not being adequate to the effect assigned to it. For seven of the fourteen

* It is a curious circumstance that in the old Persian language, preserved in the cuneatic legends of the alphabetic class, the pronoun of the first person singular should be identical with the name of the first man. The same pronoun is *Aham* in Sanscrit, and *Azem* in Zend.

syllables in the uppermost legend are already written with single characters, or, if with two, still without any vowel-letter; if, then, the whole of that legend were to be so written, only a quarter of its length could, at the most, be thereby abstracted; and, consequently, upon a similar supposition with regard to the others, they would, *cæteris paribus*, be three quarters, instead of only half as long as that with which they are compared. We are, therefore, as it would appear, unavoidably reduced to the necessity of concluding that the characters they are written with, must be either contractions of alphabetic groups or ideagrams; and those characters, I may further observe, are proved to be limited to signs of the latter kind, by the omission of the verb substantive in the principal legend,—an omission which, as I have shown in the case of the original Pentateuch, and, perhaps, still more strikingly in that of the Coptic translations of the Septuagint and Greek Testament,—strongly indicates a predominant familiarity of the writer with ideographic modes of designation, and thus renders probable his use of such modes in one, at least, if not in both, of his subordinate legends.

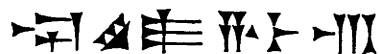
A further objection to the assumption of the second and third kinds of the writing in question being alphabetic, is suggested by another feature in the appearance of the above, or indeed in that of any other specimen of the triple inscriptions of the Persians. The characters are separated by a certain mark into distinct groups, only in the first legend of the epigraph before us. Now, if the elements of the second and third kinds of writing employed in this epigraph, were symbols, each of which was significant by itself, we can easily conceive why they were not parcelled into separate combinations. But if they were letters, which become significant only by uniting several of them together, it appears quite inexplicable that an insculptor, who showed himself perfectly aware of the advantage of distinctly grouping the characters in one kind of alphabetic writing, should not have equally availed himself of it in the other two kinds.

13. With regard to the species of cuneatic writing called the second, or the Median kind, several of the characters in this, and in the sort termed the first kind, are very similar; and four of them, viz., , , , , are absolutely identical. Hence it is plain that the framer of the Persian cuneiform alphabet introduced into it, through the force of habit, four of the elements of the older kind of writing, long previously familiar to him; and, consequently, he must, from the same cause, have adopted, if they were therein phonetically

used, their powers as well as their shapes, as far as suited the alphabet he was constructing ; that is, if they represented consonants or vowels in the older writing, he would necessarily have given them the very same values in his new system ; or, if they denoted whole syllables in the former kind of writing, he must have selected parts of those syllables as their powers in the latter kind. But the four characters above adduced are perfectly ascertained to be, in the first kind of cuneiform writing, equivalent to respectively *k*, *r*, *t*, and *s* ; while no corresponding powers, except for the last of the four, would answer in the second kind ; and, as far as I can find, the only ones claimed for them on the supposition of their being therein employed with phonetic significations are, for the first and second respectively, *pu* and *pa*, by both Westergaard and Hincks, and for the third and fourth, in like manner, *jo* and *s*, by the former author, and *yu* and *as*, by the latter. The requisite condition, then, in order to the cuneatic writing called Median being really phonetic, is complied with in only one of the four cases,—a coincidence which, therefore, must be looked on as merely fortuitous. But, even allowing to this single instance as much weight as to any one of the rest, there is, still, a balance of evidence to the extent of three to one against the elements of this writing being phonetic, and, consequently, in favour of their being ideagraphic signs.

14. With respect to the third, the Babylonian, and the Ninevite* kinds of cuneiform writing, which have all of them a close affinity to each other, the principal transcriber of specimens of the last mentioned kind, M. Botta, in the French memoir lately published by him, wherein he professes to determine the variants or homophones belonging to this writing, has, by his manner of treating the subject, even in his introductory example, shown that the objects of his research are, in reality, not letters of the same power, but ideagrams of the same meaning, whatever might be the words by which they were formerly read.







The following line presents to us the example in question :



This series of six characters the author considers as expressing the name of some

* Khorsabád, where the bas-reliefs and cuneiform inscriptions have been found, the beautiful engraved copies of which do so much credit to the skill of M. Botta as an artist, is supposed to be the site of the ancient city of Nineveh.

castle or fortified town, from its frequent occurrence in lists connected with bas-relief representations of the capture of such places ; and, if he had viewed it only in this general light, without limiting it to being a phonetic designation, he would, most probably, have been so far in the right. His leading remarks upon this supposed alphabetic denomination are as follows :

“ Il faut d’abord en retrancher le premier signe , qui, quelle qu’en soit la valeur phonétique, précède tous les noms de villes représentées à Khor-sabad. Ce caractère doit signifier ville ou pays, car c’est un équivalent indubitable du signe , lequel n’est autre chose, à son tour, que le signe  de Persépolis. Comme on le sait, en effet, celui-ci, deux fois répété et suivi du signe du pluriel, représente, à Persépolis, le mot qui doit signifier région. De plus, à Nakchi Roustam, ce même signe , se trouve en tête des noms de pays, comme cela a lieu, pour le signe , à Khorsabad. Il n’y a donc pas lieu de douter que , ne soit un caractère signifiant à lui seul, ou par abréviation, pays, région ou ville.”*

So much for the initial character of the series, and for M. Botta’s mode of proving two other characters equivalent to it, evidently not in sound but in meaning. With respect to the five remaining elements of his example, he observes in the next page that he has, in the inscriptions at Van, found their order inverted ; and to reconcile this circumstance with his theory of their being phonetic signs, he is forced to assume, either that the last three form no part of the name, but convey over again pretty much the same meaning as the first one ; or that those three express the same sound as the two immediately preceding them when taken in their original order :

“ Chose remarquable, on le voit même renversé, et écrit ainsi cela me semble prouver complètement que les deux portions de ce nom sont indépendantes l’une de l’autre, puisqu’on peut les transposer. Cela me semble d’autant plus certain, qu’à Persépolis les groupes [the last three] paraissent avoir le sens de peuple ou région ; du moins, dans la colonne assyrienne, ils occupent une place qui répond à celle de ces mots dans la colonne persane. On peut, cependant, d’expliquer ce fait d’une autre manière. On peut supposer que, puisque les groupes [the two after the first] remplacent les groupes [the last

* *Journal Asiatique*, Quatrième Serie, tom. ix. pp. 377-8.

three], ils représentent des sons à peu près semblables : dans ce cas, il serait possible de ramener le nom en question au nom même du rocher sur lequel est bâti le château de Van, le Khorkhor.”*

But, surely, without resorting to either of those arbitrary assumptions, the natural inference from the circumstance observed by M. Botta is, that, if the series in question be a name at all, it is one of the old characteristic denominations, which consisted in an enumeration of the qualities by which a person or place was supposed to be distinguished ;—an ideagraphic description which was not in the least altered by changing the order of the enumerated attributes.

15. One of the most striking proofs of the non-phonetic nature of the hieroglyphic writing in the general texts (outside the royal cartouches) of the Egyptians legends, is grounded on the impossibility of reading such of them as belong to the second century, in any of the dialects of the Coptic, as then spoken by the Egyptians, or, indeed, in any known language whatever. The dates of the legends referred to are fixed by the names of the Roman emperors phonetically expressed in their cartouches ; and the dialects made use of about the same time in Egypt are preserved to some extent in the remains of the Coptic translations of the Scriptures that were framed in the above-mentioned century. But if the latest specimens of the writing in question be not phonetic, then, *a fortiori*, none of the earlier ones could be of such a description. This point may be seen more fully discussed in the first chapter of the second part of my Work. Now, a similar proof can be brought to bear against the supposition of the legends in either the third or the Babylonian species of cuneatic character being alphabetically written. A vast number of bricks, or fragments of bricks, with writing in the latter kind of character stamped on one of their sides, have been dug out of the ruins of Babylon ; as is, in the following passage, incidentally attested, from personal observation, by a traveller who paid particular attention to the subject :

“ I must here remark, that I have only given one specimen of the inscription on each style of brick ; but there are endless varieties, as the millions of scattered fragments show, and which might be an interesting pursuit for any future traveller, who had leisure for the object, to examine and duly copy the result.”†

From the prevalence thus indicated of inscriptions in a certain species of

* *Journal Asiatique*, Quatrieme Serie, tom. ix. pp. 379–80.

† Travels by Sir Robert Ker Porter, vol. ii. p. 395.

cuneiform character in Babylon during the days of her splendour, it may, I submit, be fairly inferred that their remains exhibit what was the national writing of the inhabitants, as long as buildings continued to be erected there, or down to the time of the capture of the town by Cyrus, after which the place was constantly on the decline, till it became a total ruin. But the national tongue of the same people, as spoken by them at the period just specified, is also preserved to us in several chapters of the book of Daniel and other portions of the original Scriptures of the Old Testament. We should, therefore, be in possession of the very language of the Babylonian inscriptions, if their lines consisted of groups immediately expressive of words; and whenever a sufficient quantity unmutilated is supplied of any species of alphabetic writing in a known tongue, it can always be deciphered and translated. This, however, remains still unaccomplished with regard to the Babylonian inscriptions, though such numbers of them have been found of considerable length, with the whole, or a great part of each, in a perfect state; nor has there been as yet elicited from any of them a connected sentence of even the simplest and briefest form. But the case is yet stronger with respect to the legends of the Persians in the third kind of cuneiform writing, which are in a cognate character, and, supposing them phonetically significant, would be in the same language, as is implied by the epithet, 'Babylonian,' which is extended to them. At all events, the purport of each of these is, known through the aid of the equivalent legend in the first kind of cuneiform writing; and if the foregoing supposition was to hold with regard to them, not only would they too be in a known language, the Chaldee, but also their groups representing names (ascertained by the same aid of corresponding legends) would not be mere characteristic descriptions indirectly suggesting those names, but would directly express their sounds; and, consequently, the analysis of those groups would at once determine the powers of several of the elements of the system. Considering, then, the great advantages that would be thus afforded to an investigator of the legends in question, and the length of time—nearly half a century—which has elapsed since they were first subjected to examination, as well as the industry, the ingenuity, and the skill that have been expended on the research, surely it must have been long since brought to a successful issue, if the writing employed in those legends had really been alphabetic. But, notwithstanding all this, there has not as yet been published, as far as I can learn, a single sentence

of this writing transcribed into Chaldee, or any other language ; and the names are made out to be expressed in letters only through means that are quite inadmissible ; as a brief reference to them, a little further on, will, I apprehend, be sufficient to show.

16. Here it may, perhaps, occur to the reader to object, that the Babylonians must be allowed to have possessed an alphabet at a very remote period ; since there is a tradition of considerable standing, that Ezra thence borrowed the square, or Chaldean character, with which the Hebrew text of the Bible is now written, and substituted it, on the return of the Jews from Babylon, for that previously employed by them, with which they had become less familiar during their Chaldean captivity, and which he, in consequence, abandoned to the use of the Samaritans. In reply to this objection, I have to state, that the story on which it rests, though so long and so generally received, is proved to be utterly unfounded by the coins dug out of the ruins of Jerusalem ; as these clearly show that the character in question retained very nearly its ancient shape (little different from that which is at present to be seen in the Samaritan copies of the Pentateuch) for, at any rate, more than 400 years after the period at which it is, in the above story, represented to have undergone a sudden and complete alteration, namely, till the death of Simon Maccabeus, about 130 years before the commencement of the Christian era. The oldest legends, of ascertained age, to whose elements the modern Hebrew letters exhibit any affinity of shape, are the Syriac inscriptions found in Palmyra, one of which is dated as early as the 360th year of the Seleucidæ, answering nearly to the forty-ninth of our era.* Whether the Hebrew character displayed at so early a date the approach to squareness which is observable in the cognate writing of those inscriptions, can now no longer be determined ; but, at any rate, it must have done so before the Christians returned to the study of Hebrew in the third century, when Origen was persuaded by his Jewish instructors that the old letters of the sacred text were abandoned, and a new set substituted, during the Babylonian captivity ;—a fiction which could not have been thought of, till a striking difference of shape had begun to appear between the Hebrew and Samaritan elements, and which,

* See Philosophical Transactions, vol. lxxviii. Part ii. Article 87. In the first volume of the second part of my Work, Plate ii., a fac-simile is given of two of the lines of the above mentioned inscriptions, as also a brief analysis of their contents in the same volume, pp. 222–225.

most probably, was invented for the purpose of accounting for that very difference. The device is just such as might be expected from men regardless of truth, who had failed to take into consideration the tendency of all writing, before the use of printing commenced, to undergo a gradual change in the form of its ingredients, as well as the likelihood that the same writing would, in the course of time, change differently in the hands of two nations which had long abstained from all intercourse with each other.

But, with respect to the statement involved in this account of the matter, and with which I am here more immediately concerned,—that the Babylonians had alphabetic writing as early as the days of Ezra,—I shall beg to offer some further remarks. In the first place, then, I would request attention to the utter improbability of the Jews having ever designedly forsaken the letters transmitted to them from their great lawgiver, and preferred to write their Scriptures with others derived from a Pagan source. In the second place, not one of the passages in the works of the early Christian fathers, which are appealed to in support of the entire story, affords the slightest confirmation of this part of it; but, on the contrary, all of them, when duly considered, will be found to contribute more or less to its refutation. The passages referred to are as follows. Origen, on occasion of stating that the four-lettered name (יהוה) was written, in the more accurate copies of the Jews, in the ancient Hebrew character, and not in that of his own day, subjoins this assertion. “For it is said that Ezra gave them, during the captivity, another set of letters in preference to their former ones.”* Eusebius, after specifying the number of years that the first Artaxerxes reigned, tells us,—in a sentence of which the original Greek is lost, but whose purport is preserved in an Armenian version,—that, in the time of that monarch, Ezra was accounted a learned scribe of the Hebrew Scriptures; who is said to have corrected all the faults of transcription that had crept into those Scriptures, and to have delivered them afresh to the Jews, in letters of a new shape.”† And Hieronymus, upon speaking of the Samaritan letters, proceeds thus: “and it is certain that Ezra, a

* Καὶ ἐν τοῖς ἀκριβοτέροις δὲ τῶν ἀντιγράφων ἰβραίοις χαρακτῆρσι κῡται τὸ ὄνομα [τετραγράμματον], ἰβραϊκοῖς δὲ, οὐ τοῖς νῦν, ἀλλὰ τοῖς ἀρχαιοτάτοις. Φασὶ γὰρ τὸν Εὐδράν ἐν τῇ αἰχμαλωσίᾳ ἐτίρους αὐτοῖς χαρακτῆρας παρὰ τοὺς προτέρους παραδιδάσκιναι.—*Origenis Opera, Ed. Benedictina*, tom. ii. p. 539.

† Artaxerxis anni xli. Hujus tempore Esdras, sacræ Scripturæ Hebræorum scriba litteratus agnoscebatur; quem aiunt omnes divinas Scripturas recoluisse, Judæisque de integro tradidisse

scribe and doctor of the law, after the capture of Jerusalem, and restoration of the Temple, under the direction of Zorobabel, invented other letters that we now make use of; whereas, up to that time, the shape of the Hebrew and Samaritan elements was the same.”* But if the characters in question were the gift of Ezra, or were new in his day, or were his invention, they hardly could have been previously in use among the Babylonians. The passages, therefore, which are relied on to prove a Pagan origin of the modern Hebrew letters, rather, as far as they bear upon the point, conduct to the very opposite conclusion; and the first semblance of any warrant for such an origin of those letters is presented to us in the Talmuds of Jerusalem and Babylon,—books of traditions, with comments thereon, which the Jews did not begin to commit to writing till about the middle of the fifth century.† In both editions of the Mishnah, the writing in which the text of the Hebrew Scriptures has been transmitted is

novis characteribus.—*Eusebii Chronicon Græco-Armeno-Latinum, Venetiis editum*, liber prior, p. 190. In the version of Hieronymus the same passage is rendered thus: “Anno mundi 4742, Artaxerxis anno sexto, Ezra sacerdos apud Hebræos insignis agnoscitur, cujus ætate pōtifex maximus habitus est Necliasib filius Joachim, filii Jesu, filii Josedech. Fuit autem Ezras eruditissimus legis divinæ, et clarus omnium Judæorum magister qui de captivitate regressi fuerunt in Judæam: affirmaturque divinas Scripturas memoriter condidisse et, ut Samaritanis non miscerentur, litteras Judaicas commutasse.”—*Eusebii Chronicon quod Hieronymus Latinum facere curavit, Henrico Stephano editum*, fo. 67. But Hieronymus admits, in his preface to this version, that he made many additions to the original from the works of later authors, in the following terms: “A Troja capta usque ad vicesimum Constantini annum, nunc addita, nunc mixta sunt plurima, quæ de Tranquillo et cæteris illustribus historicis curiosissime excerptimus.” The Armenian version, therefore, is more to be depended on, than that of Hieronymus, for the exact sense of the lost passage of Eusebius.

* Samaritani etiam Pentateuchum Mosis totidem litteris [scilicet 22] scriptitant, figuris tantum et apicibus discrepantes: certumque est Esdram scribam, legisque doctorem, post captam Ierosolymam, et instaurationem Templi sub Zorobabel, alias litteras reperisse quibus nunc utimur; quum ad illud usque tempus iidem Samaritanorum et Hebræorum characteres fuerint.—*Hieronymi Opera, Ed. Benedictina*, tom. i. p. 318.

† The Jewish traditions composing the *Mishnah*, or secondary law (called in Greek *Deuterosis*), were not committed to writing till after the death of Augustine, Bishop of Hippo, in the year of our era 430, as appears from the following passage in his works: “Nescit autem [adversarius] habere præter Scripturas legitimas et propheticas Judæos quasdam traditiones suas, quas non scriptas habent, sed memoriter tenent, et alter in alterum loquendo transfundit, quas Deuterosin vocant.”—*Augustinus contra Adversarium Legis et Proph.*, lib. ii. cap. 1.

repeatedly called אַשּׁוּרִיָּת, 'Assyriac,' and is stated to have been such ever since the days of Ezra.* But in the *Gemara*, or commentary of each, contradictory explanations are offered of this epithet; some of the Talmudic Rabbins assigning its proper meaning to it, and affirming that the writing in question was so denominated on account of its having been brought from Assyria; while others of them would have us believe the word here to signify 'happy,' as if it were written בְּאַשּׁוּרִיָּת, 'beatified.'† אַשּׁוּרִיָּת, however, is no where else to be met with, used in the latter acceptance, and even if it were, this meaning of it, in the passage referred to, is excluded by the context, as it would be absurd to attribute happiness to the elements of any sort of writing. But whether the bearing of those passages was thus perverted to make them accord with the national prejudices of the Jews, or because it was perceived that the tradition conveyed in them, when taken in their natural sense, would not stand the test of examination, that tradition must, at any rate, be rejected, as it is inconsistent with all that is known of this people, to suppose that they would ever have wittingly allowed their sacred text to be written with letters of profane origin. Neither would Christian divines, after the revival of learning in Europe, have endeavoured to strain the passages I have quoted of the early fathers to a sense in conformity with the tradition here adverted to, had they not at first estimated too highly the veracity of the Talmudic writers, and attached a weight to their evidence far above that to which it has been since found to be entitled. In the third place, the principal schools of the Jews, after the destruction of Jerusalem, were held in Babylonia, where they lasted till the persecution of the Arabians put an end to them, early in the eleventh century; and it was in those schools, most probably, that the Hebrew character was improved and brought near to its present state. From

* וּבְתַנְהָ לְהֵם בְּיָמֵי עֶזְרָא בְּכַתֵּב אַשּׁוּרִיָּת, Et data fuit ipsis [scil. Lex Mosis] diebus Esræ in Scriptura Assyriaca.—*Talmud Babylonicus, Tractatus Sanhedrim*, sect. 2.

כְּתָב אַשּׁוּרִיָּת הֵיא כְּתָב שְׁלֵנוּ, Scriptura Assyriaca est ea, quam nos hodie habemus [scil. in textu Biblico].—*Talmud Hierosol., Gemara Tractatus Megilla*, sect. 1.

† In the Rabbinical annotations on both the treatises referred to in the preceding note may be found the following and other equivalent passages :

לְמָה נִקְרָא שְׁמָה אַשּׁוּרִיָּת שְׁעָלָה עִמָּהֶם מֵאַשּׁוּר, Quare vocatur ejus nomen [Scriptura] Assyriaca? quia ascendit cum iis ex Assyria.

לְמָה נִקְרָאת אַשּׁוּרִיָּת שְׁמֵאֲשֻׁרֵת כְּתָב, Quare vocatur Assyriaca? quia est beatificata Scriptura.

this source the character in question may be easily conceived to have acquired its denomination of 'Chaldean,' though not from the earlier one put forward through the ignorance and vanity of the Talmudic Rabbins; nor is there ground entitled to the slightest credit for ascribing to the Babylonians of ancient times any knowledge whatever of the use of letters. The faint resemblances of Shemitic characters met with, in a few instances, upon bricks in the ruins of the city formerly occupied by them, have the appearance of irregular lines accidentally worn in those bricks during the course of a long series of ages, rather than designedly excavated in them by human agency; and are, at any rate, too thinly scattered through the place to be looked upon as elements of any species of national writing; so that, even supposing them to be letters, they can be ascribed only to foreigners who are known to have made use of such characters, as, for instance, to Phœnicians who may have resorted to Babylon for the purposes of trade, or to the Jews who were detained there as captives and slaves for seventy years.

17. The ideagraphic nature of the cuneiform writing of the Babylonians is illustrated, in a very striking manner, by the copy of a large, though not entire specimen of it, marked *g*, in Plate lxxvii. of Sir Robert Ker Porter's Travels. This copy presents to view, amidst cuneatic ingredients, thirteen ovals, which the author has, indeed, left blank on account of the faintness of the figures inside their originals; but he informs us of those figures being pictorial, and similar to others upon seals, likewise found in the ruins of Babylon, of which he gives delineations in Plate lxxx. Now, those ovals are not at all, like modern seals, detached from the body of the text; and, although they are not as completely dispersed through that text as the Egyptian cartouches are through hieroglyphic inscriptions, yet, in the different parts of the document in which they occur, they are mingled with surrounding cuneiform characters, just as the cartouches alluded to are with hieroglyphs. They have, therefore, a much closer correspondence with those cartouches than with seals, or any subsidiary additions to signatures, and must be looked upon as primary denominations of the parties to whom this document referred. How a symbolic representation of some quality attributed to an individual, or of some remarkable event in his life, might recal a characteristic appellation of him, grounded on that quality or event, to the memory of a reader acquainted with his history, and familiar with the language of the insculp-

tor, has been elsewhere explained by me ; and the ovals under discussion serve to throw strong light on this theory, as their contents—generally a single figure in each—cannot, for a moment, be confounded with phonetic signs ; we might just as well imagine a crest, or coat of arms, or a human head, upon a modern seal, to be thereon phonetically employed. But my principal reason for directing attention to this curious specimen is on account of its bearing on the nature of the national writing of the Babylonians ; for, if any ingredients of a legend were phonetic, the designations of proper names would be of this description ; but in the one under consideration those designations are evidently ideagraphic, and, therefore, *a fortiori*, so must be all the remaining portions of its text. When the true use of the ovals in question was wholly forgotten, they came to be looked upon, by the ignorant inhabitants of the surrounding country, just in the light in which the cartouches belonging to hieroglyphic legends were long viewed in Egypt, namely, as repositories of magic characters suited to the purposes of incantation. From Sir Robert's account of the matter, it would appear that he had met with several specimens of cuneiform writing which contained some of those ovals, although he has given a copy of only one such specimen. The following are brief notices of his upon this subject. "The specimen (*g*) is singularly curious and valuable, having the impressions of many seals upon it ;* they are now very faint, but enough remains to show the forms of animals and talismanic symbols. It is on baked clay, and was found at Babylon."† "The impression of the seal contains the figure of a man grasping a bird of a goose-shape by the neck. Many similar seals are dug up amongst the ruins. I have another, in agate, of a man, and some symbolical forms. The specimens of baked clay, already described as having been stamped with numerous seals, are sufficient evidence how common was their use ; their import can only be guessed, but it is likely all were connected with mystic incantation."‡

18. Although an argument against a theory, from its consequences, can be pressed only on those who maintain them to be thence fairly inferred, yet, when

* The whole of the Babylonian writing in each specimen appears to have been impressed upon clay, while yet in a soft state, by means of a framed stamp containing the legend reversed, and so far to have resembled modern printing. There are, however, instances in which this writing has been found insculped upon stone.

† Travels, &c., vol. ii. p. 420.

‡ Ibidem, p. 425.

one, manifestly erroneous, is drawn by a man of ability, it certainly tends to render suspicious the assumption on which it is made to rest. Considered in this light, the following extract from Major Rawlinson's Memoir is not to be overlooked in the present discussion. "The Babylonian is, unquestionably, the most ancient of the three great classes of cuneiform writing. It is well known that legends in this character are stamped upon the bricks which are excavated from the foundations of all the buildings in Mesopotamia, Babylonia, and Chaldea, that possess the highest and most authentic claims to antiquity; and it is hardly extravagant, therefore, to assign its invention to the primitive race which settled in the plains of Shinar. It embraces, however, so many varieties, and it is spread over such a vast extent of country, that Orientalists have been long divided in opinion, as to whether its multitudinous branches can be considered as belonging to one type of alphabet and language. Those who have studied the subject with most care (and I would particularly instance M. Botta, the discoverer of the Nineveh marbles) have arrived at the conviction that all the inscriptions in the complicated cuneiform character, which are severally found upon rocks, upon bricks, upon slabs, and upon cylinders, from the Persian mountains to the shores of the Mediterranean, do in reality belong to one single alphabetical system; and they further believe the variations, which are perceptible in the different modes of writing, to be analogous in a general measure to the varieties of hand and text which characterize the graphic and glyphic arts of the present day. I hesitate, certainly, with the superficial acquaintance which I possess at present with the subject, to place my opinion in opposition to theirs; and yet I can hardly subscribe in all its amplitude to this general and complete amalgamation. I perceive, in fact, as I think, modifications of a constant and peculiar character, which, perhaps, are hardly sufficient to establish a distinction of phonetic organization between the Babylonian and Assyrian writing, but which may be held, nevertheless, to constitute varieties of alphabetical formation; and the inscriptions of Elymais, also, from their manifest dissimilarity to either one system or the other, are entitled, I consider, to an independent rank. I proceed, therefore, with some diffidence, to exhibit a classification of the complicated cuneiform writing according to the opinions which I have formed from a tolerably extensive examination of the inscriptions, premising, at the same time, that I see no sufficient grounds at present to prevent us from attaching all the languages which the various alpha-

bets are employed to represent, to that one great family which it is the custom (improperly enough) to designate as the Semitic; and that I leave untouched the great and essential question, whether the difference of character indicate a difference of orthographical structure, or whether the varieties of formation are merely analogous to the diversity which exists between the Estranghelo and the Nestorian alphabet, the printed and the cursive Hebrew, or the Cufic and the modern Arabic. The complicated cuneiform character, then, may, I think, be divided into three distinct groups,—Babylonian, Assyrian, and Elymean; and the two former of these groups will again admit of subdivision into minor branches. Of the Babylonian there are only two marked varieties: the character of the cylinders [and bricks] may be considered as the type of the one; that of the third column of the trilingual inscriptions of Persia, of the other. The former is probably the primitive cuneiform alphabet. It is also of extensive application. It is found upon the bricks which compose the foundations of the primæval cities of Shinar, at Babylon, at Erech, at Accad, and at Calneh; and, if the Birs-i-Nimrūd be admitted to represent the tower of Babel,—an identification which is supported, not merely by the character of the monument, but also by the universal belief of the early Talmudists,—it must, in the substructure of that edifice, embody the vernacular dialect of Shinar, at the period when ‘the whole earth was of one language and of one speech (Gen. xi. 1).’”*

Throughout this extract it is assumed, as a point too obvious to require any proof, that the several kinds of cuneatic writing,—no matter how much they may differ from each other in the number and complexity of the combinations of wedges constituting their respective elements,—are all of them alphabetic; and, in more than one part of it, this assumption conducts to the inference that writing of this description was known to mankind before the tower of Babel was erected, or the confusion of tongues took place in the plains of Shinar! It is unnecessary to urge against this extravagant conclusion the proofs I have elsewhere adduced of the fact, that Moses was the first man who made use of alphabetic writing; as its fallacy can be exposed quite independently of the consideration of that fact. Had the sons of Noah possessed an alphabet, no people descended from them, that is, not one of the nations on the surface of the earth, could have since been

* Journal of the Royal Asiatic Society, vol. x. part i. pp. 20–2.

found destitute of the benefit of this invaluable instrument of human learning. A people, indeed, who had long been accustomed to the employment of ideagrams, might from prejudice refuse admittance to an alphabetic method of designation, or, after its introduction, so, from ideagraphic habits, deteriorate and corrupt its nature, as gradually to render it useless, and finally abandon it. But none who had begun with this species of writing would ever have given it up for any other kind.

19. The last topic to which I shall here advert is the extremely vague, indefinite, and, consequently, useless nature assigned to the Babylonian, and third Persian kind of cuneiform writing, by such persons as assume the meaning of legends in which the characters belonging to those kinds are respectively employed, to be phonetically conveyed. M. Salvolini's attempt to decipher and interpret three of the shortest lines of the Rosetta inscription, on a similar supposition with respect to the mode of their ingredients being significant, bears just in like manner against the application of the phonetic theory to the hieroglyphic system of the Egyptians; as has been, I will venture to say, fully shown in the first chapter of the second part of my Work. But the argument tells with much greater force in the present instance; as the authors who have endeavoured to resolve specimens of the two cognate kinds of writing, now under consideration, into letters, have displayed far superior talents for such an undertaking; and the circumstance of their resorting to plans of operation that have the effect of representing the writing of each kind as totally unsuited for use, is not to be attributed to any deficiency of acuteness or skill on their part, but solely to the absolute impossibility of making it out legible, consistently with the assumption of its being phonetic.

Respecting the powers of the cuneiform letters of the Babylonians, Doctor Hincks gives us the following information, in a paper of his which was read at the last meeting of the Academy in 1846. "A character which represents a consonant followed by *a*, generally loses its vowel, if it precedes a character in the same word which represents any syllable beginning with the same consonant; and a character which represents a consonant followed by *u*, generally loses its vowel, if it precedes a character of the same value [that is, in such instances, the character referred to is, at the beginning of a group, stripped of all power, and, in other positions, is reduced from a syllabic sign to a consonant]. In these

cases I substitute an apostrophe for the vowel that is to be suppressed. The vowels *i* and *u* are scarcely distinguished; and, in the application of the preceding rule, syllables commencing with the same consonant, and terminating with *i* and *u*, are regarded as equivalent. I have, therefore, classed them together, placing, however, those characters first which appear most decidedly to have contained *i*, and those last which always expressed *u*. The consonants *r* and *l* are not distinguished; nor are *b*, *p*, *w*, and *m*; nor *k*, *g*, and *kh*; nor *s* and the other sibilants, except in one instance.—See note on 65. *Ch* appears to have been expressed by *s*, and *j* by *k*; but, perhaps, not in every instance.”—*On the three Kinds of Persepolitan Writing*, &c., p. 16.*

In a subsequent part of the same Essay, which was read to a meeting of the Academy in the first month of the present year, Dr. Hincks makes, from causes which it is here unnecessary to consider, some rectifications of the vocalic structure of the system, which he describes in the following manner: “— observing the greatly increased resemblance to the Semitic dialects which the language assumed in consequence of these changes, I thought it best to alter the vowel notation, substituting *e*, equivalent to the Hebrew *Sheva*, for the *u* of my former alphabet. The simple characters, then, consist of consonants followed by these two vowels, *a* (·) and *e* (·). The other vowels are represented by combinations of these with each other, with or without the intervention of certain semivocal labials and gutturals, distinguished in the alphabet by having a ‡ prefixed to them. Thus, *a . be* is *au*, or *â* (·); *a . ge*, *ê* (·); *e . be* or *e . ba*, *û* or *ô*; and *e . ge* or *e . ga*, *î*; while the short vowels proceed from the concurrence of two *e*'s, the latter of which becomes mute, while the former is generally to be sounded as *i*, but occasionally as other short vowels. Further researches may, perhaps, supply more accurate rules; but I feel confident that, by following these, the pronunciation will be attained in a very approximate manner. The concurrence of two equivalent syllables will be readily seen to be analogous to the Hebrew *dagesh*. It is found, however, in cases where *dagesh* could not occur in Hebrew, as in *ne . ne*, when initial. Here, I have little doubt, the duplication has the effect of lengthening the vowel, or detaching it from any syllable containing *e*

* I am obliged to quote the page of the above passage from the Author's Essay, printed in a separate form, which he was so kind as to send me; as the volume of the Transactions of the Academy in which it is to appear has not yet been published.

that might follow. I read the above *n'ni*, or *n'nē*; *ne.ne.be* must be read *n'nē.be*, not *n'neb*."—*On the three Kinds of Persepolitan Writing*, &c., p. 21.

In our author's practice, however, he does not adhere strictly to the rules here laid down; as, for instance, he deprives syllabic signs of the vocal part of their power, in other cases besides those in which they are followed by characters of, respectively, the same values in their consonantal part; and, after substituting a short *e* for *u*, as one of his two primary vowels, he still retains the *u* in its former capacity, in addition to the secondary one which he arrived at by means of combinations specified in the latter of the above extracts. But a clearer conception of his theory with regard to this subject will be got from the following example:



The eight characters here presented for inspection are copies of those constituting the first line of the great Babylonian inscription, in the Museum of the Honorable the East India Company. They certainly have very little the appearance of letters, and look far more like symbols, significant, independently of all combinations, each of them by itself. Dr. Hincks, however, assumes them to convey a phonetic expression of the name *Nebuchadnezzar*, exclusively of several other groups of characters of the like nature, unnecessary to be here considered, and to which he attributes the phonetic representations of the very same name. The series of characters now before us, he, after rejecting a deciphering of them previously adopted, reads, in the final part of his Essay, in the three following ways:

Nabu . k' . ku . ba . ru . ba . sa . ra, in page 21.

N'nebe . g' . ge . w' . re . w' . cha . r', in page 26.

Nebe k u l u cha r', in page 26.

To the last of these readings he gives the preference at the close of his Memoir, in the following terms: "The correct pronunciation of the name appears to be *Nebekûlûchar*:" and yet this word corresponds with the sound of the name in question solely in its first two syllables, where, it may also be observed, the resemblance is effected only by taking the extraordinary liberty of attaching to the initial character a phonetic value of double the legitimate length; and to which character the author, in another assumed phonetic representation of

this name in the same page, assigns simply the power of *N'*. Upon this, however, and some other objections, which must naturally occur to the mind, I shall not dwell; as he might possibly have lessened or removed the grounds for them, if he had taken more time to digest and mature his plan. But there is one evil essentially connected with the supposition of the above series of characters constituting an alphabetic designation of a word, which is fatal to this hypothesis, and to which I now request attention. In order to ascertain in how many ways this series can be read, the numbers are to be multiplied together which express the several amounts of the different phonetic values of its ingredients considered each of them separately. These numbers might, perhaps, by the introduction of some checks, be reduced; but not one element of the series could, I will venture to say, be limited, even through the most guarded modification of the system, to a single value, without running into gross inconsistencies in the application of this value to it in other situations. Here, however, I have to confine myself to the particular form of the phonetic theory adopted by our author. According to this theory, then, as determined by his exposition of it combined with his practice, the initial character of the series admits of *three* values, viz.: *Nabu*, *N'nebe*, *N'*; the second, of *four* values, viz.: *k'*, *kh'*, *g'*, *j'*; the third, of *eight* values, viz.: *ku*, *kh*, *gu*, *ju*, *ke*, *khe*, *ge*, *je*; the fourth, of *eight* values, viz.: *ba*, *pa*, *wa*, *ma*, *b'*, *p'*, *w'*, *m'*; the fifth, of *four* values, viz.: *ru*, *lu*, *re*, *le*; the sixth, of *eight* values, viz.: *ba*, *pa*, *wa*, *ma*, *b'*, *p'*, *w'*, *m'*; the seventh, of *four* values, viz.: *sa*, *sha*, *za*, *cha*; and the eighth, of *four* values, viz.: *ra*, *la*, *r'*, *l'*. In this enumeration of the different values of each element of the series, I have restricted myself to the primary vocalization employed by Dr. Hincks in his first two readings, by which several of the numbers are considerably lessened (as, for instance, without this restriction, the different phonetic values of the third character would be, in addition to the eight already given, eight more, viz.: *ka*, *kha*, *ga*, *ja*, *k'*, *kh'*, *g'*, *j'*); neither have I availed myself of the further variations afforded by the instances of secondary vocalization which occur in his third reading: but, with all these limitations, the number of modes in which the series in question may be read, according to his system, amounts to 393,216. Now, admitting for a moment some one of these to be the correct reading of the series, how is a decipherer to find out which of them is that one? Surely, writing of which each sentence, and even every word of any considerable length in each sentence,

admitted of being read in such an endless variety of ways, would, for all practical purposes, be just as nugatory as if it were utterly unmeaning and illegible.

On the other hand, Major Rawlinson has directed his attention more immediately to the third kind of cuneiform writing of the Persians, which he does not, as fully as Dr. Hincks, identify with the Babylonian kind, though still considering it as having a close affinity thereto; and he enumerates in his *Memoir* (page 29) a list of twenty-seven names, which, he imagines, he has succeeded in deciphering in this character. He does not, indeed, give any example by which we might test the soundness of his method of analyzing this writing: but by conferring on it the distinctive title of the 'Achæmenian Babylonian,' he makes it a species of the Babylonian class; and by describing an imperfection of the latter writing in a general way, and, consequently, in a manner that shows it to belong equally to the former, he thus enables us to arrive at some idea of his mode of dealing with the subordinate branch. The imperfection pointed out by him is in effect of the same nature, though he has not accounted for it in the same way, as the one which I have, in the foregoing observations, brought home to the system of Dr. Hincks, and which, in truth, appears to be essentially connected with every application of the phonetic theory to this, or the Babylonian kind of cuneiform writing. Major Rawlinson, however, does not seem to have been aware of its extent or its consequences; as may be inferred from his words upon the subject, which are as follows. "I attribute the great diversity which is observable in the internal orthography of names and words to one or all of the four following causes. Firstly, each consonant possessed two forms representing it as a mute and as a sonant, so that in expressing a dissyllable, in which such a consonant was medial, it was optional to employ either the one or the other, or both of these forms together. Secondly, the vowel sounds were inherent in the sonant consonants (and, perhaps, also at the commencement of the mutes), yet, for greater perspicuity, it was allowable to represent the vowels at will by definite signs. Thirdly, redundant consonants were frequently introduced, for no other purpose, as I conjecture, but that of euphony. Fourthly, the phonetic organization was so minute and elaborate that, although each form was designed to represent a distinct and specific sound, yet, in the orthography of names (and particularly of foreign names), the artist was perpetually liable to confound the characters."*

* *Journal of the Royal Asiatic Society*, vol. x. part i. p. 30.

As far as I can understand this passage, if the four assumptions contained in it with regard to the practice of the ancient insculptor were conceded, a modern decipherer could, by the aid of rules directly thence deduced, make out any proposed name whatever from any assigned group of sufficient length, belonging to the more general kind of writing referred to, or its subordinate species. He could, for instance, through the first article, get rid of the opposition of any of the medial characters whose powers, determined by other names, would not answer in this one, by stripping them here of those powers and degrading them for this occasion to the rank of mutes;* or he could, through the third, evade the disturbing effects of any initial or final elements that were, in like manner, unsuited to his purpose, by reducing them to euphonic redundants, unconnected with the essential parts of the name to be expressed. Moreover, if he should, besides removing the obstruction of refractory powers, want to get others in their place, he could, with the help of the parenthetical part of the second article, virtually convert them into any vowel-letters he chose; or, by means of the fourth, transform them into other consonants of the requisite powers. I do not suppose that our author has, in his own practice, pushed those rules to the full extent to which they might be carried; but still, I must observe, it is by the application of a theory to extreme cases that its validity is to be tested. I may, perhaps, have mistaken the meaning of part of the above passage; and, therefore, would not press too closely the consequences drawn from that part; but, at all events, the rest of it, which is clearly intelligible, yields quite too great a latitude of choice to a decipherer to admit of his analysis of any specimen of writing subjected to such treatment being of the slightest value.

* I understand the terms 'mute' and 'sonant' consonants, in the first article of the statement above referred to, in their ordinary acceptation of consonants that are passed over in silence, or are uttered in the pronunciation of the words in which they occur. The technical distinction, somewhat similarly expressed in Sanscrit Grammar, of letters into 'surd' and 'sonant,' appears to be inapplicable; as the classification arising from the former distinction is, in the specified article, expressly limited to consonants, while that depending on the latter one includes vowels (see Wilkins's Sanscrit Grammar, p. 16); and, indeed, in the sense in which the Hindu distinction is made,—namely, of letters that can or cannot be audibly uttered without the aid of others joined to them,—there are in reality no sonants but the vowels, and all the consonants are surds. In the case, however, of a sentence, of which the purport is not precisely fixed by means of an example, it is very possible that I may have misconceived the author's meaning.

I have but one further remark to make on this subject. Major Rawlinson has, in his analysis of the Behistun record, frequently declared that he was enabled to restore mutilated parts of the tablets in the first kind of cuneatic writing by the aid of those in the second or third kind ; from which it would seem, at first blush, to follow that he had succeeded in deciphering the latter two kinds of writing. Now, while I deny this conclusion, I feel myself bound, in justice to our author, to add, that I have a perfect reliance on his veracity. A brief example will suffice to remove the apparent inconsistency between these two statements. The name of the royal son of Hystaspes, I have already observed, was characteristic, and denoted 'a coercer,' through a close affinity to some term of that signification in the Persian language of his day, the root of which most probably was,—as that of an equivalent term is known to a certainty to be in both Sanscrit and Zend,—*dr̥i*. A Persian, therefore, of former times, about the period when the legends were insculped, would have read any group of symbols representing 'a coercer,' by some modification of either *dr̥i*, or, at all events, a root cognate thereto ; the similarity of which derivative to the word *Darius* would serve to remind him of that name, provided he was previously familiar with its sound, and aware of the personal character of the sovereign to whom it was applied. Let us, then, suppose the Major to have noticed a certain group occurring in the Behistun tablets of the second or third kind, in several places corresponding to others in the tablets of the first kind, in which the name DARIWUSH is inserted. He might thence clearly infer that this group was intended to denote the sovereign so named, and could by its aid, if it occurred in a part of either of the former kinds of legends corresponding to a mutilated place in one of the latter kind, restore the alphabetic name in that place. By such a mode of investigation, I have not the slightest doubt but that he has, in accordance with his assertion, identified the groups in the third kind of cuneiform character, which served to designate, in some way or other, the persons and places distinguished by the spoken names he has specified ; and it was quite natural for him, as habituated solely to alphabetic modes of writing, to assume, in the first instance, that those designations were phonetic, and, consequently, that he could, by resolving them into their separate ingredients, arrive at the elements of an alphabet. But the gross absurdities in which, as I have shown more particularly under the last head, the views of very able and ingenious investigators are in-

volved through this assumption, contribute powerfully to establish its unsoundness, independently of the many proofs bearing the same way, which have been submitted for consideration in preceding parts of this Essay. No alternative, therefore, seems left to us, but to conclude that the groups in question denoted names only in the imperfect manner above described, and that it is a mere waste of time and labour to attempt to analyze them by methods in accordance with the notions hitherto in vogue upon the subject.

The foregoing observations are, many of them, under the disadvantage of having to struggle against the present current of popular opinion ; yet I do not despair of their eventually gaining a favourable reception, when the test of experience shall have come more fully to their aid. In the mean time, I trust that they will give no offence to the authors whose views I have had occasion to canvass, and that they will be taken by those gentlemen, as they are meant, in good part.